CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, January 25, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Jan.				
*25	Sewer system	Gainesville, Fla.	S. & B. S.	1- 4
25	Wireless telegraph apparatus	New York, N. Y.	S.	1-11
*31	Water & sewer sys.	Parral, Mex.	S.	12-14
*31	Fixtures	Ft. Meade, S. Dak.		1-18
Feb.				
*1	Canals, etc.	Roswell, N. Mex.	P. & S.	12-28
*1	Power house	West Point, N. Y.	P. S. & B. S.	1- 4
*1	Dam, etc.	Boise, Idaho	P. & S.	1- 4
1	Vessel.	Washington, D. C.	P. & S.	1-11
1	Water-works.	Palatka, Fla.	S.	1-18
*1	Coagulating basin.	Norfolk, Va.	P. & S.	1-18
2	Ditch.	Willmar, Minn.	S.	1-18
3	Water system.	Ft Fremont, S. C.	S. P. & B. S.	1-11
5	Drain.	Iowa City, Ia.	S. & B. S.	1- 4
*6	Portland cement.	Belle Fourche, S. Dak.	S. & B. S.	1-11
*6	Portland cement.	Montrose, Colo.	S. & B. S.	1-18
*6	Water system.	Greeley, Colo.	S. & B. S.	1- 4
*7	Bulkheads, etc.	Baltimore, Md.	P. & S.	1-18
*8	Gas plant.	Hattiesburg, Miss.	P. & S.	1-25
*8	Steel lock gates.	Nashville, Tenn.	S. & B. S.	1-11
10	Fire alarm system.	Norfolk, Va.	P. S. & B. S.	1-18
10	Steel caisson.	Charleston, S. C.	S.	1-11
10	Pier.	Portsmouth, N. H.	S.	1-18
*14	Bridges.	Philadelphia, Pa.	P. S. & B. S.	1-18
*16	Sewers.	Mohawk, N. Y.	S. & B. S.	1-25
Mch.				
*5	Elevator.	Grand Rapids, Mich.	Data	1-18
*10	Two snagboats.	Vicksburg, Miss.	P. & S.	1-11
Apr.				
*2	Port works.	Chile	P. & S.	5- 4
5	Wharves.	Manila, P. I.	P. & S.	12-14

*Work advertised in Engineering News.

NOTE—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close.	Work.	Place.	See issue.
LIGHT, HEAT AND POWER PLANTS.			
Jan. 27	Lighting	Albany, N. Y.	Jan. 25
Jan. 30	Electrical apparatus	Washington, D. C.	Jan. 18
Feb. 1	Power house, West Point, N. Y. Advertised, Eng. News, Jan. 4 to 25.		Jan. 4
Feb. 1	Gas regulators, etc.	New York, N. Y.	Jan. 25
Feb. 1	Gas, lamps, etc.	New York, N. Y.	Jan. 25
Feb. 7	Lighting	Greenwich, N. Y.	Jan. 11
Feb. 8	Gas plant, complete	Hattiesburg, Miss. Advertised, Eng. News, Jan. 25 to Feb. 8.	Jan. 25
Feb. 9	Lighting plant, water-w	Watonga, Okla. Advertised, Eng. News, Jan. 18 and 25.	Jan. 11
Feb. 12	Lighting plant	Afton, Ia.	Jan. 25
Feb. 14	Electric light plant	Gunnison, Colo.	Jan. 25
Feb. 20	Lighting, Oil City, Pa. Advertised, Eng. News, Jan. 25 to Feb. 8.		Jan. 25
Feb. 24	Power plant	Lima, O. Advertised, Eng. News, Jan. 25.	Jan. 25
Feb. 26	Generators, etc.	Winnipeg, Man.	Jan. 18
BRIDGES.			
Jan. 30	Bridges	Waseca, Minn.	Jan. 25
Feb. 1	Bridges	Harrisburg, Pa.	Jan. 18
Feb. 3	Bridge, Chandler, Okla.		Jan. 25
Feb. 6	Bridges, Laporte, Ind.		Jan. 25
Feb. 7	Bridge, Colfax, Wash.		Jan. 25
Feb. 12	Bridge	Delaware, O.	Jan. 25
Feb. 14	Bridges, Philadelphia, Pa. Advertised, Eng. News, Jan. 18 to Feb. 1.		Jan. 18
Feb. 19	Viaduct	Atlanta, Ga. Advertised, Eng. News, Jan. 25 and Feb. 1.	Jan. 25
Feb. 20	Bridges	Wayne, Neb.	Jan. 25
Mar. 31	Bridge	Custer, S. Dak.	Jan. 25
BUILDINGS.			
Jan. 25	Plumbing, etc.	New York, N. Y.	Jan. 18
Jan. 26	Jail	Jacksonville, Fla.	Dec. 28
Jan. 26	Plumbing, heating, etc., Fort Logan H. Roots, Ark.		Jan. 4
Jan. 26	Shelter, Fort Morgan, Ala.		Jan. 4
Jan. 29	School, East Orange, N. J.		Jan. 11
Jan. 29	Building, East Orange, N. J.		Jan. 11
Jan. 29	Stone wall, Washington, D. C.		Jan. 18
Jan. 29	Buildings, New York, N. Y.		Jan. 25
Jan. 29	Addition, Brooklyn, N. Y.		Jan. 25
Jan. 29	Addition, New York, N. Y.		Jan. 25
Jan. 29	Wiring, New York, N. Y.		Jan. 25
Jan. 30	Heating, Blackwell's Island, N. Y.		Jan. 18
Jan. 30	Wiring, Washington, D. C.		Jan. 11
Jan. 31	School, Bancroft, Neb.		Jan. 4
Jan. 31	Library plans, Toronto, Ont.		Nov. 23
Jan. 31	Fixtures, Ft. Meade, S. Dak. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Feb. 1	Building	Lincoln, Neb.	Jan. 25
Feb. 1	Wiring, New York, N. Y. Advertised, Eng. News, Jan. 18 to Feb. 1.		Jan. 25
Feb. 1	Library, Edgerton, Wis.		Dec. 21
Feb. 1	Building, Des Moines, Ia.		Jan. 11
Feb. 1	Town hall, Perham, Minn.		Jan. 11
Feb. 2	Building, Northfield, Minn.		Jan. 11
Feb. 3	Windows and frames, Washington, D. C.		Jan. 18
Feb. 5	Heating and Plumbing, Logan, Ia.		Jan. 4
Feb. 5	Hotel, Springfield, Mo.		Jan. 18
Feb. 5	Court-house, Chicago, Ill.		Jan. 25
Feb. 5	School, Mt. Vernon, N. Y.		Jan. 25
Feb. 6	Veranda, Delaware City, Del. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Feb. 6	Heating, etc.	Donaldsville, La.	Jan. 18
Feb. 6	Steel sheds, New Orleans, La.		Jan. 4
Feb. 6	Officers' quarters, Chelsea, Mass.		Jan. 4
Feb. 7	Alterations, Gowanda, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 7	Jail, Walla Walla, Wash.		Jan. 25
Feb. 8	Court-house, New York, N. Y.		Jan. 25
Feb. 8	Building, Crawfordsville, Ind.		Jan. 25
Feb. 9	Building, Ames, Ia.		Jan. 4
Feb. 14	Elevators, Baltimore, Md. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 14	Gymnasium, Annapolis, Md. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 16	Armory, Holyoke, Mass.		Jan. 18
Feb. 26	Granite, Washington, D. C. Advertised, Eng. News, Jan. 25 to Feb. 15.		Jan. 25
Mar. 5	Elevator, Grand Rapids, Mich. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
WATER SUPPLY AND IRRIGATION.			
Jan. 25	Boiler, Parkersburg, W. Va. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Jan. 27	Pumps, Lincoln, Neb.		Jan. 25
Jan. 30	Cisterns, New Orleans, La.		Jan. 25
Jan. 30	Water-works, Fayette, Mo.		Jan. 18
Jan. 30	Water-works, Osceola, Ark. Advertised, Eng. News, Jan. 18.		Jan. 18
Jan. 30	Pumping station, Cincinnati, O.		Jan. 4
Jan. 31	Water and sewer system, Parral, Mex. Advertised, Eng. News, Dec. 14.		Dec. 14
Feb. 1	Coagulating basin, Norfolk, Va. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Feb. 1	Water-works, Palatka, Fla.		Jan. 18
Feb. 2	Water system, Waverly, Minn.		Jan. 18
Feb. 3	Water system, Fort Fremont, S. C.		Jan. 11
Feb. 5	Water-works, McMinnville, Ore.		Jan. 11
Feb. 5	Condensers, Jacksonville, Fla.		Jan. 18
Feb. 6	Water-works, Brandon, Minn.		Jan. 18
Feb. 6	Water system, Greeley, Colo. Advertised, Eng. News, Jan. 4 and 11.		Jan. 4
Feb. 6	Water plant, Rapid City, S. Dak.		Jan. 25
Feb. 6	Reservoir, San Francisco, Cal.		Jan. 25
Feb. 6	Water plant, Cochran, Ga. Advertised, Eng. News, Jan. 25.		Jan. 25
Feb. 7	Stand-pipe, filter plant, Rahway, N. J. Advertised, Eng. News, Jan. 18 to Feb. 1.		Jan. 18
Feb. 10	Reservoir, etc., Sandy Hook, N. J.		Jan. 18
Feb. 14	Water system, Gunnison, Colo.		Jan. 25
Feb. 15	Water-works, De Queen, Ark. Advertised, Eng. News, Jan. 4.		Jan. 4
Feb. 16	Water system, Riverside Park, Va.		Jan. 25
Feb. 19	Water and light plant, Jackson, Mo. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
SEWERAGE.			
Jan. 25	Sewer system, Lexington, N. C. Advertised, Eng. News, Jan. 4 to 18.		Jan. 4
Jan. 25	Sewer system, Gainesville, Fla. Advertised, Eng. News, Jan. 4 to 18.		Jan. 4
Jan. 25	Sewers, Cincinnati, O.		Jan. 11
Jan. 29	Sewage disposal plant, Fairmont, Ia.		Jan. 11
Jan. 27	Sewers, Des Moines, Ia.		Jan. 18
Jan. 30	Sewer system, Rochelle, Ill.		Jan. 25
Jan. 31	Sewers, New York, N. Y.		Jan. 25
Feb. 1	Sewers, Reading, Pa. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Feb. 1	Sewer system, St. Johns, Ore.		Dec. 21
Feb. 2	Sewers, Harrisburg, Pa.		Jan. 25
Feb. 5	Sewers, Montgomery, Ala.		Jan. 25
Feb. 5	Sewers, Fresno, Cal.		Jan. 18
Feb. 5	Sewers, Cincinnati, O.		Jan. 18
Feb. 5	Sewer system, Narberth, Pa. Advertised, Eng. News, Jan. 18 and 25.		Jan. 18
Feb. 6	Addition, disposal plant, Savannah, Ga.		Jan. 18
Feb. 8	Sewers, New York, N. Y.		Jan. 25
Feb. 10	Sewer, Jefferson Barracks, Mo.		Jan. 25
Feb. 15	Sewer, Emmetsburg, Ia.		Jan. 25
Feb. 15	Sewers, Cresco, Ia.		Jan. 25
Feb. 15	Storm sewer system, Dayton, O.		Jan. 4
Feb. 16	Sewers, Mohawk, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 19	Purification plant, Ft Assiniboine, Mont. Advertised, Eng. News, Jan. 25 to Feb. 15.		Jan. 25
STREETS AND ROADS.			
Jan. 25	Grading, Cincinnati, O.		Jan. 18
Jan. 25	Paving, Winchester, Ind.		Jan. 11
Jan. 26	Paving, Buffalo, N. Y.		Jan. 18
Jan. 26	Paving supplies, Detroit, Mich.		Jan. 25
Jan. 29	Paving, Dallas, Tex.		Jan. 25
Jan. 29	Paving, Galveston, Tex.		Jan. 18
Jan. 30	Paving, Delhi, O.		Jan. 25
Jan. 31	Paving, Cleveland, O.		Jan. 25
Feb. 1	Paving, Lawton, Okla.		Jan. 11
Feb. 5	Grading, Rockville, Ind.		Jan. 11
Feb. 5	Paving, Lawrence, Kan. Advertised, Eng. News, Jan. 18.		Jan. 18
Feb. 5	Paving, St. Paul, Minn.		Jan. 18
Feb. 5	Paving, Greensburg, Ind.		Jan. 25
Feb. 6	Paving, Columbus, Ga.		Jan. 25
Feb. 7	Roads, Jefferson Barracks, Mo.		Jan. 18
Feb. 8	Paving, New York, N. Y.		Jan. 25
Feb. 10	Paving sidewalks, Roanoke, Va. Advertised, Eng. News, Jan. 18.		Jan. 18
Feb. 13	Paving, Independence, Kan. Advertised, Eng. News, Jan. 18.		Jan. 18
Feb. 14	Paving, Little Rock, Ark.		Jan. 18
Feb. 15	Paving, Rhinelander, Wis.		Jan. 25
No date.	Paving, Detroit, Mich.		Jan. 25
MISCELLANEOUS CONTRACTS.			
Jan. 25	Wireless teleg'ph apparatus, N. Y., N. Y.		Jan. 11
Jan. 25	Concrete sea wall, Indianapolis, Ind.		Jan. 25
Jan. 29	Plants, etc., Atlantic Coast Line. Advertised, Eng. News, Jan. 4 to 18.		Jan. 4
Jan. 30	Ingots, spelter, Italy (Foreign)		Jan. 4
Jan. 31	Tunnel, Guanapuato, Mex.		Dec. 14
Feb. 1	Canals, Roswell, N. Mex. Advertised, Eng. News, Dec. 28 to Jan. 18.		Dec. 28
Feb. 1	Dam, Boise, Idaho. Advertised, Eng. News, Jan. 4 to 25.		Jan. 4
Feb. 1	Vessel, Washington, D. C.		Jan. 11
Feb. 2	Supplies, Panama		Jan. 18
Feb. 2	Ditch, Willmar, Minn.		Jan. 18
Feb. 2	Boilers, Buffalo, N. Y.		Jan. 25
Feb. 5	Test borings, New York, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 5	Drain, Iowa City, Ia.		Jan. 4
Feb. 6	Steel sheds, New Orleans, La. Advertised, Eng. News, Dec. 28 and Jan. 4.		Dec. 28
Feb. 6	Cement, Belle Fourche, S. Dak. Advertised, Eng. News, Jan. 11 to Jan. 25.		Jan. 11
Feb. 6	Dock, Palm Beach, Fla.		Jan. 18
Feb. 6	Cement, Montrose, Colo. Advertised, Eng. News, Jan. 18 to Feb. 1.		Jan. 18
Feb. 6	Rubber hose, Pensacola, Fla.		Jan. 25
Feb. 6	Incinerator extension, New York, N. Y.		Jan. 25
Feb. 7	Bulkheads, etc., Baltimore, Md. Advertised, Eng. News, Jan. 18 to Feb. 1.		Jan. 18
Feb. 7	Railway, Belgium (Foreign)		Jan. 18
Feb. 8	Riprap breakwaters, New York, N. Y. Advertised, Eng. News, Jan. 11 to Feb. 1.		Jan. 11
Feb. 8	Steel lock gates, Nashville, Tenn. Advertised, Eng. News, Jan. 11 to Feb. 1.		Jan. 11
Feb. 8	Drainage ditch, Sioux City, Ia.		Jan. 4
Feb. 9	Building, Spain (Foreign)		Jan. 18
Feb. 10	Pier, Portsmouth, N. H.		Jan. 18
Feb. 10	Fire alarm system, Norfolk, Va.		Jan. 18
Feb. 19	Wooden snagboats, Dallas, Tex. Advertised, Eng. News, Jan. 18 to Feb. 8.		Jan. 18
Feb. 10	Breakwaters, etc., Egypt (Foreign)		Jan. 4
Feb. 10	Steel caisson, Charleston, S. C.		Jan. 11
Feb. 13	Steel tower, Shreveport, La. Advertised, Eng. News, Dec. 28 to Feb. 8.		Dec. 28
Feb. 14	Iron gates, Winchester, Va.		Jan. 25
Feb. 15	Locks and dams, Dallas, Tex. Advertised, Eng. News, Jan. 4 to 18 and Feb. 8.		Jan. 4
Feb. 23	Dredging, Galveston, Tex. Advertised, Eng. News, Jan. 25 to Feb. 15.		Jan. 25
Feb. 23	Filling, Galveston, Tex. Advertised, Eng. News, Jan. 25 to Feb. 15.		Jan. 25
Feb. 28	Sluice gates, etc., Los Angeles, Cal. Advertised, Eng. News, Jan. 25 to Feb. 8.		Jan. 25
Mar. 10	Two snagboats, Vicksburg, Miss. Advertised, Eng. News, Jan. 11-18, Feb. 1-8.		Jan. 11
Apr. 2	Port works, Chile Advertised, Eng. News, April 1, 1906.		May 4
Apr. 3	Ditch, Spirit Lake, Ia.		Jan. 18
Apr. 5	Wharves, Manila, P. I.		Dec. 14
May 1	Steel dock, Chile		Nov. 9
No date.	Dyke, Lincoln, Neb. Advertised, Eng. News, Jan. 18.		Jan. 18
CIVIL SERVICE EXAMINATIONS.			
Jan. 26	Engineering Draftsman, Chicago, Ill.		Jan. 11
Jan. 31	Laboratory Assistant, Washington, D. C.		Jan. 11
Jan. 31	Ink Chemist, Washington, D. C.		Jan. 11
Feb. 13	Asst. Engineer, New York, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 14	Machinist, Washington, D. C.		Jan. 25
Feb. 15	Inspector Steel Cons., New York, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25
Feb. 16	Transitman, Computer, New York, N. Y. Advertised, Eng. News, Jan. 25 and Feb. 1.		Jan. 25

TO ENGINEERS AND CONTRACTORS

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

ADDRESS

Wainwright A. S. Randall, Editor,
The Construction News Department.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

BAY SHORE & PACIFIC.—We are officially informed that surveys are completed for this railway, which will be 33 miles long. The line will be constructed in city of San Diego, Cal. Contract is to be let within three months' time. H. T. Richards is Pres. and Ch. Engr., at San Diego.

BULLFROG & GOLDFIELD.—We are advised, officially, that location surveys are completed and part of right-of-way secured for this railroad. Contract for its construction has not been let, as definite details remain to be decided. The line will extend from Beatty to Gold Centre, Rhyolite, Goldfield and Bullfrog, Nev., 81 miles. R. W. Welsh, Tonopah, Nev., is Ch. Engr.; John W. Brock is Pres., at Philadelphia, Pa.

BROWNSVILLE, HIDALGO & NORTHERN.—This company has been chartered in Texas, we are officially informed, to build a railroad from Brownsville to Houston, Tex., about 330 miles, with branches as follows: From a point in Lavaca County to San Antonio, 90 miles; from Rudolph, in Cameron County, to Sam Fordyce, in Hidalgo County, 55 miles; from Brownsville northwest to Hidalgo, 50 miles; from Brownsville east to Brazos Island, 25 miles, making a total of about 550 miles. Capital stock, $600,000. Principal office will be at Brownsville. Uriah Lott is Pres., Jas. A. Browne, Vice-Pres., and P. E. Blalack, Secy. It is stated that engineering parties will be put into the field at once and surveys will be made for the line from Brazos Island via Brownsville to Hidalgo.

BUFFALO & SUSQUEHANNA.—Survey in Hog Back Mountain is in progress, we are officially informed, for proposed tunnel. Proposed work will cost between $1,000,000 and $2,000,000, it is estimated. H. Herden is Ch. Engr., at Galeton, Pa.

CENTRAL RY. OF OREGON.—We are officially informed that funds have been secured for building this railway and construction will begin Feb. 1. Subscribers themselves will build the road. T. W. Davidson, one of the company's directors, will have charge of construction work. Alonzo Clever, of Union, Ore., is Pres., and A. B. Browne, also of Union, is Ch. Engr. Motive power may be either steam or electricity. The line will be 66 miles in length, extending from Union to Cove, Nibley, Island City, Lagrande, Summerville and Elgin.

CALDWELL & NORTHERN.—This railroad may be extended this year from Edgemont to Butler, Tenn., 54 miles. J. R. Ervin is Ch. Engr., at Lenoir, N. C.; L. T. Nichols is Gen. Mgr., at Chester, S. C.

CANADIAN PACIFIC.—An official statement of new mileage completed by this company during 1905, aggregating 282 miles, is as follows: From Lipton to Strassburg, 55 miles; Wetaskiwin to Daysland, 50 miles; Lacombe to milepost 50, 50 miles; Brookdale to Varcoe, 18 miles; Lauder to Broomhill, 20 miles; Keston northwest, 60 miles; Darlingford to Kaleida, six miles; Moose Jaw to Elbow, 15 miles; Yank, B. C., to the international boundary, eight miles. The following lines are under construction: Pleasant Hill branch, Strassburg to Saskatoon, and from Saskatoon west, 34 miles; Wetaskiwin branch, from Daysland east, 50 miles; Lacombe branch, from milepost 50 east, 50 miles; Wolseley-Reston extension, from milepost 60 to Wolseley, 62 miles; Kootenay Central Railway, from Golden, B. C., south, five miles; Teulon branch, Teulon north, ten miles. An announcement has been made that this company will build a loop 20 miles long in Field, B. C., to eliminate several heavy grades. The estimated cost of the work is about $1,200,000. W. F. Tye is Ch. Engr., at Montreal.

CHICAGO & ILLINOIS WESTERN.—It is reported that surveys are under way for an extension of this railway from a point in Illinois to the Mississippi River, over 200 miles long. O. P. Chamberlain is Ch. Engr., at Hawthorne, Ill.

CHICAGO, MILWAUKEE & ST. PAUL.—Andrew Rinker, City Engr., of Minneapolis, Minn., has submitted to council plans for track raising in South Minneapolis. In detail, his proposition was as follows: Fill in 610,000 cu. yds. at 30 cts. per yd., $183,000; retaining walls and abutments, 61,000 cu. yds., at 60 cts. a yd., $366,000; excavation in streets crossing right-of-way, 600,000 cu. yds., at 30 cts. per yd., $180,000; bridges on the main line and on H. & D. Division, $740,000; depressing Sixth Ave. under crossing from the Washington Ave. subway, $60,000; relaying water mains, pavements and resetting curbs and gutters, $10,000; add for additional bridges south of 24th St. and for engineering expenses, 5% of total cost, $76,950; total, $1,615,950. Total mileage of tracks to be elevated: Right-of-way through city, nine miles; in Eighth St. yards, four miles; in South Minneapolis shop yards, 8.2 miles; total mileage, 21.2 miles. D. J. Whittemore is Ch. Engr., at Chicago.

Improvements to cost over $100,000 are to be made in La Crosse, Wis., according to La Crosse "Chronicle." The line between Milwaukee and La Crosse is being double tracked. At a later date the line from La Crosse to Minneapolis will also be double tracked and straightened. Bad grades on both lines will be eliminated and the division from La Crosse to Minneapolis will not follow the curves of the Mississippi River as closely as formerly. This will shorten the line consderably.

ESCANABA & LAKE SUPERIOR.—It is reported that this company proposes to build a branch from Gleason to Austin, Mich., 15 miles, to open up large iron mines. W. E. Wells is Gen. Mgr., Wells, Mich.

ELIZABETH RIVER RY.—Contracts will be let at once, it is said, for the construction of this railway. The company was incorporated recently in Virginia to build a line from the Norfolk & Portsmouth Belt Line at the crossing fo the Elizabeth River to Money Point, Mill Creek and Great Bridge, Va. The officers are Edward A. Buell, Pres.; Norfolk, Va.; Alvah H. Martin, vice-Pres., Berkley, Va., and C. E. Dudley, Secy. and Treas., Portsmouth, Va.

ERIE.—The directors of this company have authorized the double-tracking of the line from Carrollton, N. Y., to Cuba, N. Y., 25 miles in connection with the new low-grade line, three miles long, which is being built from Cuba, N. Y., to Hunts, N. Y., on the Buffalo division. This will give the Erie a continuous double track from Salamanca, N. Y., to Jersey City, N. J., 414 miles. Also see item under Miscellaneous Contracts, regarding excavation work.

FORT WORTH & DENVER CITY.—A newspaper report states that 91 miles of track will be replaced with 90-lb. rails this year and that steel bridges will replace the present structures. E. H. Jones is Res. Engr., at Fort Worth, Tex.

HOLLY RIVER & ADDISON.—George A. Hechmer, Gen. Mgr., Palmer, W. Va., is reported to have stated that this company will build an extension from Webster Springs to Leatherwood, W. Va., eleven miles. There will be one steel bridge on the line, the piers for which are now being built. These will be completed about May.

INDIANAPOLIS & LOUISVILLE. — The contract for building a branch of this road, which is a part of the Chicago, Indianapolis & Louisville Ry., from a point on the main line, near Quincy, Ind., to a connection with the Illinois Central at Victoria, Ind., 50 miles, has been awarded to the DICKASON CONSTRUCTION CO., Railway Exchange, Chicago, Ill., and work is to begin about Feb. 1. Pres., W. E. Dorwin, 359 Railway Exchange, Chicago. This is a correction of an item published on Jan. 18.

ILLINOIS CENTRAL.—We are officially informed that surveys have been completed for a line from Corinth, Miss., to Haleyville, 80.16 miles in length. The line touches no other towns of importance. The right-of-way is being secured. Bids have been received on the work, but the contract has not yet been let. This company is making no extension from Auburn to Taylorville or Roadhouse, Ill. W. J. Harahan, Fourth Vice-Pres., Chicago, is the official in charge of this project.

IDAHO & MONTANA.—Incorporated in Idaho to build a railroad from a point on the Saint Anthony branch of the Oregon Short Line, just south of Rigby, Idaho, southeast up the South Fork of the Snake River through Jacksons Hole, to Cookeville, Wyo., 150 miles, with a branch from a point near the Idaho-Wyoming state line, northeast to the southern boundary of Yellowstone Park, a distance of about 75 miles. Capital stock, $225,000. Incorporators: W. H. Bancroft, E. Buckingham, P. L. Williams, Wm. Ashton and T. J. Dudleston.

JOHNSON CITY SOUTHERN.—The Southern Railway Co. has awarded a contract to W. J. OLIVER & CO., of Knoxville, Tenn., for the construction of the Johnson City Railroad, a coal line which will run from Embreeville, Tenn., to Marion, N. C. The contract price will be in excess of $5,000,000. The new road will be about 90 miles long and will have many tunnels. It will save the Southern a haulage of about 70 miles, and it will take fully three years to complete the construction.

LOUISIANA RY. & NAVIGATION CO.—A contract has been awarded to E. P. WHITE, of Baton Rouge, La., to grade company's line in three parishes.

LOUISVILLE & NASHVILLE.—This company is reported to have authorized the construction of a "cut-off" from Four Mile, Ky., on the Cumberland Valley division, to Williamsburg, Ky., on the Knoxville division, thereby continuing a project which was started some time ago. EDINGTON, GRIFFITTS & CO., of Knoxville, Tenn., are said to be the contractors. Arthur G. Gloster, of Knoxville, is at the head of an engineering party which is in Whitley County, Kentucky, at the present time. This party is locating a line from Four Mile to Williamsburg.

NEVADA-CALIFORNIA-OREGON. — Surveys are being made for an extension from Madeline, Cal., to Alturas, 40 miles, and construction will begin early in the spring. Geo. S. Oliver is Ch. Engr., at Reno, Nev.

NEW YORK, NEW HAVEN & HARTFORD.—At recent meeting of the directors of the New Haven road, in New York, it was voted to double-track the New England road from Waterbury to Bristol, Conn., at a cost of $1,500,000. Edward Gagel is Ch. Engr., at New Haven, Conn.

OKLAHOMA, TEXAS & NORTHWESTERN.—Henry Knapp, Pres. of this company, according to press reports, has stated that the road has been financed and contracts let for material and construction. Two lines are contemplated, the first being from Chickasha, Ind. T., northwest, with the western terminus at Trinidad, Colo., which, it is planned, will be built first; and the second from Oklahoma City, Okla., to El Paso, Tex. It is expected to have part of the line in operation by June 1.

PINE BLUFF NORTH & SOUTH.—We are officially informed that surveys are under way for this railroad, which will connect at some point with the Chicago, Rock Island & Pacific. It is to be an independent line. Financial arrangements have been satisfactorily made. Z. Orto is Pres., at Pine Bluff, Ark.; E. C. Buchanan is Ch. Engr., at present in camp at Sherrill, Ark.

PACIFIC RY.—By amended articles of incorporation filed in Washington the Pacific Railway Co. has changed its name to the Chicago, Milwaukee & St. Paul Railway Co. of Washington. By the terms of the new articles the company is incorporated to build a railway, commencing at some convenient point to be determined in Seattle or Tacoma and extending thence in an easterly and southeasterly direction to some consequent point on the eastern boundary line of Washington. The estimated length is given as 300 miles. Fully noted in previous issues.

SAN FRANCISCO, IDAHO & MONTANA.—William Peyton Mason, of Minneapolis, Minn., has been elected president of this company. An issue of $5,000,000 of bonds has been issued. The contract for building the railroad, from Snake River to Winnemucca, Nev., has been let to the PACIFIC DEVELOPMENT CO., of Boise, Idaho. The line will run from Butte, Mont., to San Francisco, Cal., via Boise. Previously mentioned.

ST. LOUIS SOUTHWESTERN.—It is reported that this company will spend $2,000,000 this year for improvements, plans having been approved. The work includes an 8-mile terminal system at Shreveport, La.; revision of grade between Texarkana, Ark., and Mt. Pleasant; reballasting and laying heavier rails, besides widening of embankments. M. L. Lynch is Ch. Engr., at Tyler, Tex.

SOMERSET RY.—This company, which recently completed ten miles of new line from Deadwater, Me., to Lake Moxie, has given a contract to J. G. WHITE & CO., 49 Exchange Pl., New York, for building a line from Lake Moxie to Kineo, a distance of 33 miles. W. M. Ayer is Mgr., at Oakland, Me.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN.—We are officially advised that survey has been made for a branch line from Henson to Hickman, Ky. No further steps have been taken. E. F. Mitchell is Engr. of Construction, St. Louis, Mo.

We are informed that BOWMAN & SULLIVAN, of Belleville, Ill., have contract for building a transfer yard at Bixby, Ill.; also contract for belt line from Spring station to Belleville and Alton, 47 miles.

SNAKE RIVER VALLEY.—This company, which is an auxiliary corporation of the Oregon R. R. & Navigation Co., has filed amended articles of incorporation in Washington, providing for the construction of 14 branches. According to the press report from Olympia, Wash., these branches will be as follows: From the mouth of the Salmon River, in Idaho, southeast, to Salmon, Idaho, thence southeast across the Lemhi Indian Reservation to Bannock Pass on the Montana state line, appriximately 300 miles. The line will pass through Canfield, Freedom, Riggs, Resort, Shoup, Noble, Salmon, Baker and Junction. The second branch is from Baker City, Ore., easterly to a point on Powder River near Keating, Ore., and thence northwest to a point between Telocasset and Haines. A third line is from a connection with the O. R. & N. at or near Milton, Ore., southeast to a point on the Grande Ronde River at or near Elgin, Ore. The fourth line is from a point at or near Bingham, Ore., along the Umatilla River to the summit of the Blue Mountains, and thence to the Grande Ronde River at or near Elgin. The fifth extension is to run from near Colfax, Wash, northwest along the Palouse River to a connection with the O. R. & N., between Diamond and Endicott, about 15 miles. The charter specifies the following nine additional lines, which, however, were provided for in the original articles of incorporation filed in 1899 and which have either been constructed or surveyed: From Eureka Flats to Grange City, Wash., with a branch to Alto, Wash.; from the O. R. & N. at Dayton, Wash., to Bolles, and thence to a connection with the Mill Creek Flume Co.'s railroad; from Dayton to Lewiston, Idaho, or Asotin, Wash.; from Elberton to Garfield, Wash., to the head waters of the Palouse River; from Moscow, Idaho, to Collins, with a branch southeast on the Clearwater River; from Cold Springs to Tanks, Ore.; from Winona, Wash., northerly to some point on the Spokane River; from Colfax, Wash., via Penewawa Creek to some point on the Snake River in Washington. G. W. Boschke is Ch. Engr., at Portland, Ore.

TENNESSEE RY.—It is reported that the Tennessee Ry. Co. has let contracts to ESKRIDGE & CARROLL, of Huntsville, Tenn., and to BURGIN, CARSON & CO., of Pioneer, Tenn., for building an extension from Buffalo Creek, Tenn., to Smoky Creek, 18 miles.

TIDEWATER RY.—The MacArthur Bros. Co. has let a contract to JERRY CONNELLY of Kansas City, Mo., to build thirteen miles on the Tidewater Railway directly west of Roanoke and extending west of Salem. DOUGLAS BROS., of Pittsburg, Pa., have also been given a contract for three miles east of Alleghany tunnel. Noted last week.

WABASH.—The Cleveland "Plain-Dealer" on Jan. 20 announced that "Squire, Sanders & Dempsey, Gen. Counsel for the Wabash lines east of Toledo, officially announced at Toledo yesterday that the Wabash is to have a line into Lorain, O., which will give direct connection from Pittsburg. The Wabash interests have bought what is known as the Industrial railroad, which has terminal tracks and a franchise in Lorain and which enters at the big manufacturing plants there. This terminal line is also used by the Lake Shore, Nickel Plate and Baltimore & Ohio. Work on the construction of a 25-mile line from Wellington to Lorain, it was also announced at Toledo yesterday, will begin within 30 days. With this branch will be incorporated as part of the Wabash system in northern Ohio the Lorain & West Virginia and the Sugar Creek & Northern. The nominal capital of $10,000 with which the Industrial line at Lorain was incorporated will be increased, it was announced yesterday, as soon as the Wabash begins building the connecting line from Wellington." The Wabash, it was further announced, plans great docks at Lorain and is now negotiating for property on which to build. Incorporation of the Sugar Creek & Northern Ry. was noted last week.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

NEW YORK, N. Y.—A contract has been awarded to the GENERAL RAILWAY SIGNAL CO., of Lincoln Park, N. Y., for interlocking and automatic block signals to be used on the New York Central & Hudson River R. R. Co.'s electric system at New York. The contract amounts to $2,000,000.

FLEMINGTON, N. J.—Citizens of Hunterdon County have held meetings recently with a view to organizing a company to build an electric railway connecting Lambertville, Stockton, Sergeantsville and Flemington.

GREENVILLE, PA.—The following companies have been chartered in [illegible] Shenango-Midland Street Railway Co., to build seven miles of road in [illegible] Sharon; capital, $42,000. [illegible] sex Street Railway Co., to build [illegible] of road in the vicinity of [illegible] 000. Shenango Northern Street [illegible] to build four miles of road in [illegible] Sharon and Hickory Township, [illegible] County; $24,000. Central Neshannock Railway Co., to build one mile [illegible] city of New Castle; $6,000. [illegible] Northern Street Railway Co., [illegible] mile of road in the city of [illegible] $6,000. Shenango Southern Street [illegible] Co., to build three miles of road [illegible] ity of Wheatland; $18,000. The [illegible] panies are controlled by the [illegible] Edwin Ripley, of Sherman, N. [illegible] of the corporations. The directors [illegible] G. Clatzan, W. H. Waugh, Greenville; [illegible] D. White, Rochester, Pa., and H. [illegible] Pittsburg. W. H. Waugh is [illegible] these companies, at Greenville.

HARRISBURG, PA.—Mayor [illegible] has signed an ordinance permitting [illegible] tension of the lines of the Central Pennsylvania Traction Co. within city, [illegible] miles of track will be laid. [illegible] will be used. Frank B. Musser [illegible]

HAZLETON, PA.—Frank [illegible] Wilkes-Barre, Pa., with J. K. [illegible] Christian Walter and A. H. [illegible] Wilkes-Barre, are promoting an [illegible] from Hazleton to Mauch Chunk. [illegible] way would be known as the Hazleton, Nanterly & Mauch Chunk.

MIDDLEBROOK, VA.—The Virginia Valley Traction Co., which will begin in [illegible] weeks, to build a trolley line from Middlebrook, in Augusta County, Va., to Staunton [illegible] last week and elected J. Frank Clemmer, Pres.; T. M. Smiley, first vice-Pres., and H. G. McGary, Secy. and Treas.

TIPTOP, VA.—W. T. Hufford [illegible] of North Tazewell, Va., will build an electric railway from Tiptop to Iron Lithia Springs, 7½ miles, and eventually may extend it to West Virginia coal fields.

GREENVILLE, S. C.—The Anderson Traction Co., which will soon undertake construction on its extension from Anderson to Belton, S. C., probably will continue on to Greenville. As previously noted, J. E. Sirrine, Engr., of Greenwood, S. C., has been appointed by the Anderson Traction Co. to superintend the construction of its extension to Belton, S. C. It is reported that bids for grading and construction have not been advertised yet.

CORINTH, MISS.—The city has granted a franchise to W. J. Lamb, Simon Rubel, M. T. Bynum, Abe Rubel, of Corinth, and C. Lennon, of Chicago, to build and operate an electric railway in Corinth; also to operate an electric lighting and power plant.

NEW IBERIA, LA.—F. A. Augur has been granted a franchise for a street railway system in this city.

CLARKSVILLE, TENN.—The "Pink Sheet Bulletin," of Chattanooga, Tenn., states that "the Clarksville Electric Street Ry. Co. has placed an order for machinery for its power plant valued at between $50,000 and $60,000 for March delivery. This is believed to be the beginning of extensive improvements in the company's street car system and its probable extension to New Providence and Dunbar's Cave." N. L. Carney is Pres.

SHELBY, O.—A company may be organized by J. W. Williams, H. W. Hildebrand and I. E. Will, of Shelby, to build an electric line from this city to Plymouth, eight miles.

CINCINNATI, O.—It is said that the Cincinnati, Georgetown & Portsmouth R. R. Co. will extend its line to Portsmouth at an early date. An extension is now being built to West Union.

FINDLAY, O.—F. W. Adams, Gen. Mgr. of the Toledo, Fostoria & Findlay Ry. Co., at Fostoria, O., is reported to have stated that an extension to Toledo will be built by next summer. The company now operates 35 miles of line, connecting Findlay, Arcadia, Fostoria, Rising Sun, Prairie Depot, Bradner and Pemberville.

INDIANAPOLIS, IND.—It is reported that the Capital Circuit Traction Co. has been incorporated, with a capital of $10,000. The promoters propose to build an electric railway connecting Danville, Lebanon, Greensburg, Martinsville, Noblesville, Franklin and Shelbyville. Charles E. Overill, James N. Crabb and others, of Indianapolis, are named as the incorporators.

TERRE HAUTE, IND.—The Indiana Southern Traction Co. has been granted an extension of a year's time from Jan. 1 [illegible] to complete its line into this city. The company will build to Sullivan and Linton.

GRAND RAPIDS, MICH.—The Grand Rapids & Battle Creek Inland Lakes Traction Co., it is reported, has the right-of-way for its proposed line practically all secured. It is said that the road is reasonably certain to be built during the coming season. William V. Jacobs, of Chicago, is Pres. of the company.

CHICAGO, ILL.—A municipal ownership traction ordinance has been passed by city council. Edward F. Dunne, the Mayor, favors this municipal ownership project.

PEORIA, ILL.—The Illinois Traction System, of which W. B. McKinley is Pres., Champaign, Ill., has been granted a 50-year franchise in East Peoria.

BOONE, IA.—The Newton & Northwestern R. R. is to be electrified and operated in conjunction with an electric railway from Des Moines to Fort Dodge. The Newton & Northwestern R. R. is 102 miles long. J. L. Burke, at Boone, Ia., is Gen. Mgr.

SIOUX FALLS, S. DAK.—The Sioux Falls Interurban Electric Ry. Co. has made announcement that it will build its proposed line to Parker. Dr. Geo. A. Pettigrew is Secy., at Sioux Falls.

NEW MADRID, MO.—Preliminary steps have been taken to build an electric railway between New Madrid and Cape Girardeau.

Among those reported interested are A. J. Matthews, Jr., William Tan- Matthews, C. D. Matthews, Jr., William Tan- ner and M. C. Gresham, of Sikeston; W. H. Stubblefield of Oran; Otto Kochtitzky, of Cape Girardeau; A. B. Hunter, W. B. Gar- nando and ... of New Madrid.

STONEWALL, IND. T.—J. E. Guyer, Cashier ... Bank & Trust Co., of Stonewall, ... B. F. Helfrich, of Stonewall, are ... in an electric railway between ... and Sulphur Springs, Ind. South ... is to be made at Sulphur T. ... Oklahoma City, Lexington ... Electric Railway.

COLORADO SPRINGS, COLO.—The Chey- ... Ry. Co. has been organized by ... H. I. Reid, R. A. Handy ... Eaton, of Colorado Springs. ... It will extend from ... Colorado Springs & Interur- ... Broadmoor to the summit of ... mountain.

SPOKANE, WASH.—Right-of-way is being secured for the electric railway which will be built ... Arthur Baines and W. H. Plum- mer, of Spokane, the promoters. Franchises have been secured. A. Austin is Engr. The railway is to be over 80 miles long.

KLAMATH FALLS, ORE.—C. N. Hawkins, Pres., and W. K. Brown, Mgr., of the Klamath Canal Co., have applied for a franchise to build a boulevard and street railway at this place.

BAKER CITY, ORE.—The Eagle Valley Power Co., with $500,000 capital, has been incorporated. The company will build an electric railway from Baker City to the Eagle Valley and Cornucopia mines. The in- corporators are Frank W. Paine, James K. Romig, John E. Bingham, Frank A. Moore and Walter M. Pierce, of Walla Walla, Wash.

BOISE, IDAHO.—The Boise Valley Con- struction Co., of Boise, has been incorpor- ated, it is reported, with a capital of $250,- 000 to construct an electric line from Boise to Caldwell. Robert Noble is one of the directors.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

PITTSFIELD, MASS.—C. K. Stearns, of Boston, is reported to be completing plans for a new power-house for the Pittsfield Street Railway Co. Bids for construction probably will be asked soon.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Feb. 1, for furnishing, putting in place and maintaining 500 gas regulators to Dec. 31. Also for furnishing steam for heating or power purposes to certain public buildings to Dec. 31. W. B. Ellison, Comr. Water Supply, Gas and Electricity.

Bids are asked until 2 p. m., Feb. 1, by W. B. Ellison, Comr. Water Supply, Gas and Electricity, (a) for furnishing gas for and to the public lamps on the streets, supplying gas, etc., for new lamps when required, for making certain repairs to lamp-posts, and for furnishing gas to public buildings to Dec. 31, 1906; (b) for furnishing gas lamps, etc., on the streets and so on, and for con- necting, lighting, extinguishing, cleaning, re- pairing and maintaining same, and also lamps belonging to the city, supplying new lamps when required, and for furnishing burners and appliances for improved system of light- ing on the streets, avenues, parks and pub- lic places to Dec. 31, 1906; (c) for furnishing naphtha or similar illuminating material for the public lamps using same, and for fur- nishing, lighting, extinguishing, cleaning, re- pairing and maintaining such lamps, supply- ing naphtha, etc., for new lamps, for fur- nishing new lamps as required, for furnish- ing or making certain repairs to lamp-posts, and for furnishing burners and appliances of improved system of lighting streets, avenues, parks and public places to Dec. 31, 1906; (d) for furnishing, operating and main- taining electric lamps for lighting streets, avenues, public buildings, parks and public places to Dec. 31, 1906.

NEW YORK, N. Y.—See under Buildings.

PATCHOGUE, L. I., N. Y.—Rossiter Mac- Govern & Co. have been incorporated with capital of $300,000 to construct electrical plants. Frank MacGovern, 17 Battery Pl, New York, is interested.

TROY, N. Y.—N. R. Holmes, of this city, Attorney for the Ticonderoga Light & Power Co., has stated that the proposed plant will cost about $50,000, and bids for construc- tion will be received in about one month. F. B. Gridley and N. R. Holmes, of Troy, and F. T. Locke and A. B. Adkins, of Ticon- deroga, are interested.

ALBANY, N. Y.—Bids are asked until 10 a. m., Jan. 27, for the care and lighting of the city lamps for the period of one year or for the period of five years. Isidore Wachs- man, Clk. Bd. Contract and Supply.

DELAWARE WATER GAP, PA.—C. J. Young, of Philadelphia, Pa., is reported to be the engineer for the Delaware Water Gap Power Co., which proposes constructing a power plant here. A dam is to be constructed across Brodheads Creek, and it is proposed to tunnel through the mountain and form a lake in Cherry Valley. A canal is also to be built. The capacity of the plant is esti- mated at 2,500 to 7,200 HP., and the cost of construction about $800,000.

CHAMBERSBURG, PA.—It is stated the borough council has passed an ordinance granting permission to the Cumberland Val- ley Railroad Co. to erect a power-house on Kennedy St. The probable cost of the plant is $[illegible].

OIL CITY, PA.—Bids are asked until 7.30 p. m., Feb. 20, for lighting city streets, buildings, etc., with electricity for five and ten years, commencing July 1st, 1906. A. M. Breckbridge, Clk. Comrs. Water and Lighting. (Advertised, Engineering News.)

B. B. Weber, c/o City Engineer's office, writes us that he is making rough estimates for a municipal electric lighting plant.

WILMINGTON, DEL.—The Philadelphia, Baltimore & Washington Railroad has invited bids for an addition to a power-house at this place. James Buckelew, Wilmington, is Principal Asst. Engr.

WASHINGTON, D. C.—James Knox Tay- lor, Supervising Arch., Treasury Dept., has awarded contract for the installation of the heating plant at the post-office building, Laramie, Wyo., to WIRTH & WINTERBOT- TOM, of Falls City, Neb., for $3,497. Bids were opened Jan. 5.

COLONIAL BEACH, VA.—Franchise has been granted to E. S. Randall for lighting the town and establishing a telephone sys- tem.

DANVILLE, VA.—City will make improve- ments to its gas plant, including the build- ing of a purifier-house and retort-house and other accessories for a daily output of 200,- 000 cu. ft. Frank Talbot is Supt. and Treas.

ANDERSON, S. C.—Savannah River Power Co. is being organized by Dr. S. M. Orr, H. H. Watkins, of Anderson; J. E. Sirrine, J. L. Orr, of Greenville, S. C.; H. A. Orr, O. H. Sheffield, of Atlanta, Ga.; and C. Elmer Smith, of York, Pa., for the development of the water powers of Gregg and Cherokee shoals on the Savannah River. It is proposed to build a stone dam at Gregg shoals 1,000 ft. long, 12 ft. high and 12 ft. wide at the base, developing 2,500 HP., which will be transmitted by electricity to Anderson and adjacent towns. Contract will shortly be let for water wheel. J. E. Sirrine, of Green- ville, S. C., is Engr.-in-Charge. Arrange- ments will be made later for development at Cherokee shoals, when electricity will be transmitted to Elberton, Lowndesville, Cal- houn Falls, Abbeville, Ga., and Greenwood, S. C. When both shoals are developed they will aggregate 9,000 HP. About $300,000 will be expended for partial development.

COLUMBIA, S. C.—The Central Carolina Power Co. is being formed with a capital of $.00,000 to construct an electrical power plant. Ambroze A. Gonzales is interested.

ROCKMART, GA.—The city has voted to issue bonds for an electric light and power plant.

MONTGOMERY, ALA.—Within the next six months the Citizens Light, Heat & Power Co. contemplates doubling the capacity of its plant at an outlay of about $50,000, and extending its lighting wires into the residence district of the city. J. M. Chumley is Ch. Engr.

HATTIESBURG, MISS.—Bids are asked until noon, Feb. 8, for 50,000 cu. ft. single lift gas holder, two benches of sixes, ex- hauster, extractor, condenser, scrubber, puri- fier, meter, boiler, heater, compressors and building. Edward J. O'Beirne, Engr., Em- pire Bldg., Atlanta, Ga. H. A. Camp, Pres. Hattiesburg Gas Co. (Advertised, Engineer- ing News.) Plans and specifications for the above are on file at the offices of Engineer- ing News, 220 Broadway, New York, and Home Life Bldg., Washington, D. C.

MORGAN CITY, LA.—It is stated that a franchise has been granted to B. M. Young to erect and operate an electric light and power plant.

LEXINGTON, KY.—The Lexington Gas Co. is reported to be about to expend $75,000 in piping the city for furnishing natural gas.

NEWARK, O.—The Licking Light & Power Co., of this city, will erect a new plant at a cost of $100,000.

CLEVELAND, O.—It has been estimated that it will cost $56,000 for the new munici- pal lighting plant, of which $16,000 is to be used in the operation of the present plant and $40,000 for erecting and equipping a new building. W. J. Springborn is Pres. Bd. Pub. Works.

LIMA, O.—Bids are asked until noon, Feb. 24, for the installation of a power plant for pumping purposes. L. L. Crumrine, Clk. Bd. Pub. Service. J. K. Brice, City Engr. (Ad- vertised, Engineering News.)

MARION, IND.—The Deisel Engine Co., of Indianapolis, Ind., is preparing plans for the new municipal lighting plant for this city.

JEFFERSONVILLE, IND.—The Louisville & Southern Indiana Traction Co. will build a large new plant at this city for generating electricity. R. W. Waite is Treas. at New Albany, Ind.

BAY CITY, MICH.—The Pere Marquette Railroad Co. is preparing to light its own premises by electricity. In the in- ward freight warehouse now being con- structed and which will be finished Feb. 15, large boilers and dynamos are to be placed to generate electricity to light both ware- houses, the passenger station occupied by the Pere Marquette and Detroit & Mackinac and the yards. A. L. Grandy is Div. Engr.

JACKSONVILLE, ILL.—S. B. Stewart, City Clk., has stated that $18,000 has been appropriated for the construction of a muni- cipal electric light plant. Edward Brown is Engr.

BATH, ILL.—The Jacksonville Journal states that "the H-T ELECTRIC CO., of this city, has the contract for installing a new city lighting plant at Bath, Ill."

BROOKPORT, ILL.—Council is considering construction of electric light and water plant.

KEOKUK, IA.—Hugh L. Cooper, 60 Wall St., New York, has prepared plans for a power plant, to be constructed at Keokuk, subject to the approval of Col. C. S. Riche, Corps Engrs., at Rock Island, Ill., and Maj. M. Meigs, of Keokuk.

SIOUX CITY, IA.—E. L. Kirk, Gen. Mgr., Sioux City Traction Co., has stated that the company will expend about $125,000 in im- provements to its power-house and equip- ment. The new machinery will consist of the following: Railway generator of 1,200 KW. capacity, two motor generators for elec- tric light and power service, an 1,800 HP. engine, and an electric crane.

AFTON, IA.—It is reported that bids are asked until Feb. 12 by E. A. Lee, Chn. Lighting Com., for an electric lighting plant.

CANON FALLS, MINN.—The Canon River Electric Co. has perfected arrangements to proceed with the construction of a hydro- electric power plant on the Canon River, Minn. H. von Schon, Engr., of Detroit, Mich., is preparing plans and specifications.

PAOLA, KAN.—We are officially informed that the council will, on Jan. 29, decide whether or not an electric light plant shall be installed. If voted on favorably, city probably will employ an engineer to draw plans and specifications. B. T. Riley is City Atty.

GRAND ISLAND, NEB.—It is stated that an election will be held March 6 to vote on issuing $35,000 of bonds for a municipal electric light plant. Edward Hooper is City Clk.

JACKSON, MO.—See under Water-Works.

BEAUMONT, TEX.—W. B. Beamer is con- templating installation of heating plant to furnish heat to business houses and resi- dences through pipes from a central plant.

DURANT, IND. T.—Choctaw Oil & Gas Co., of Cherryvale, Kan., and Atoka, I. T., will apply for 20-year franchise for furnish- ing the city with gas. It is stated the com- pany has leased 15,000 acres of land 18 miles from Durant, and will arrange at once to drill for gas.

MILL CREEK, IND. T.—City has granted franchise to the Mill Creek Electric Light & Power Co. to establish electric light plant.

GUNNISON, COLO.—Bids are asked until noon, Feb. 14, by F. W. Harper, Town Clk., for the construction of a complete electric lighting plant. T. J. Thompson, Mayor.

FARMINGTON, N. MEX.—A new lighting system, to cost $30,000, is to be established here. Edward D. Crowley, Asst. Engr., Arizona & Colorado R. R. Tombstone, Ariz., is interested.

PENDLETON, ORE.—The Eagle Valley Electric Power Co. plans to harness the Eagle River with electrical power, which will be furnished mining plants in the near vicinity. The company is capitalized at $500,000 and a large plant will be built, work to begin in early spring. Eastern capital has been secured to assist in pro- moting the large enterprise. J. K. Romig, of Baker City, Ore., is Secy. and Mgr.

SAN DIEGO, CAL.—The San Diego Con- solidated Gas & Electric Co. has decided to extend the gas service to Coronado by plac- ing pipes under the waters of the bay. A gas reservoir will be constructed at Coron- ado. C. W. Wiggins is Ch. Engr.

SAN FRANCISCO, CAL.—A large project to take up the water of Feather River in northern California and carry it through tunnels and aqueducts until 400,000 HP. has been developed, or enough to supply all the towns of the Sacramento valley, Oakland, Alameda and Berkeley with electric power. is the purpose of a $50,000,000 corporation organized by I. Brown Wilson & Co., of New York and San Francisco. This project is at the head of the Sacramento valley and will furnish power for this valley and to San Francisco by means of two pole transmission lines 175 miles in length.

SAN FRANCISCO, CAL.—The Pacific Gas & Electric Co. is the name of a new lighting company into which the following companies have been merged: The San Francisco Gas & Electric Co., the Bay Counties Power Co., the Valley Counties Power Co., the Standard Electric Co. of California, the Oakland Gas, Light & Heat Co., California Central Gas & Electric Co., United Gas & Electric Co., Sacramento Electric, Gas & Railway Co., South Yuba Water Co., Central California Electric Co., Berkeley Electric Lighting Co., Fresno Gas & Electric Light Co., Stockton Water Co. and Vallejo Gas Co.

GLOBE, ARIZ.—The Globe Electric Light & Power Co. will erect a gas plant capable of making 150,000 cu. ft. of illuminating gas every 24 hours. The plant will be of the most modern construction.

PRINCE ALBERT, SASK.—Willis Chap- man, Engr., Toronto, Ont., has prepared plans to develop the water power, situated twelve miles from Prince Albert, and to con- vey it to the town for light, heat and power purposes.

PARRY SOUND, ONT.—The council will engage an engineer to prepare plans and specifications for necessary improvements to the electric light plant here.

CHARLOTTETOWN, P. E. I.—The Prince Edward Island Railway power-house and car sheds will be rebuilt.

ST. JOHN, N. B.—It is reported that the city council has decided to erect a municipal lighting plant at this place.

WINNIPEG, MAN.—We are officially ad- vised that the date of opening bids for sup- plying two 500 HP. electric generators, noted on Jan. 18, has been changed to 3.30 p. m., Feb. 26. C. J. Brown is City Clk. (Adver- tised, Engineering News.)

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—Bids were received on Jan. 19 at the County Commissioners' office, Salem, for furnishing and constructing the substructure of a highway bridge, on the Merrimac River, at Haverhill, Mass., as fol- lows: Lawler Bros., Charlestown, Mass., $100,855, to be completed Jan. 1, 1907; Met- ropolitan Const. Co., Boston, $91,734, Nov. 1, 1906; Lahey & Buswell Co., Haverhill, Mass., $84,294, Nov. 1, 1906; Wm. L. Miller, Boston, $84,202, Oct. 20, 1906; Holbrook, Cabot & Rollins Corp., Boston, $81,586, Dec. 31,1906; Patrick McGovern, Boston, $74,248, Jan. 1, 1907; New Jersey Bridge Co., Fuller Bldg., New York, $62,591, Aug. 15, 1906.

Bids on the superstructure, received on Jan. 19, were: H. P. Converse & Co., Boston, Mass., $91,000, 150 days; Owego Bridge Co., Owego, N. Y., $88,900, 80 days; Canton Bridge Co., Canton, O., $89,426, 90 days; King Bridge Co., New York, $87,900, six months; Berlin Const. Co., Berlin, Conn., $85,876, 90 days; New England Structural Co., Boston, $85,505, 100 days; Boston Bridge Works, Inc., Boston, $83,985, 90 days; Penn Steel Co., Steelton, Pa., $79,850; New Jer- sey Bridge Co., New York, $74,865, six months; American Bridge Co., New York, $73,490, 120 days.

SYRACUSE, N. Y.—It is officially stated that a bill will be introduced into the Legis- lature providing for a new bridge across the Oswego Canal, at North Salina St., Syra- cuse. Cost, about $27,500.

ATLANTIC CITY, N. J.—The Atlantic County Board of Freeholders is interested in erecting a bridge to connect Beasley's Point with Somer's Point. J. W. Hackney is City Engr.

CAMDEN, N. J.—Plans have been com- pleted for a bascule trolley and highway bridge at Federal St., in this city. Cost, $75,000. J. J. Albertson, Magnolia, N. J., is Engr.

WEST CHESTER, PA.—We are officially informed that the contracts for two stone bridges across the Juniata River, near this city, for the Pennsylvania Railroad Co., were awarded to THE EYRE CONSTRUCTION CO., of this city. The total cost is about $1,500,000.

RYDE, PA.—We are officially informed that the contract for constructing a stone arch bridge across the Juniata River at this place, for the Pennsylvania Railroad Co., was awarded to SPARKS & EVANS, of Philadelphia, Pa.

PHILADELPHIA, PA.—Proposals have been invited by Henderson & Co. (Limited), of this city, for rebuilding the Spring Garden St. bridge across the Schuylkill River.

PHILADELPHIA, PA.—Complete plans, specifications and bidding sheet for bridges, on Schedule A, as advertised in Engineering News, are on file at office of Engineering News, New York. Bids are asked until Feb. 14. We are officially informed that the fol- lowing appropriations have been made for these bridges: $45,000 for a 96-ft. span half through-plate girder bridge on concrete piers, over the Connecting Railway, at Front St.; $65,000 for substructure for a 7-track railroad bridge at 25th St.; $100,000 for a plate girder deck bridge on columns and piers, over the Pennsylvania Railroad Co.'s tracks at Spring Garden St.; $40,000 for a 60-ft. span deck plate girder bridge on con- crete abutments, at Sedgley Ave.; $42,000 for a 60-ft. reinforced concrete arch bridge, with an 80-ft. span, at Wyoming Ave., over the Philadelphia, Newton & New York Rail- road Co.'s tracks, and $30,000 for a stone arch bridge, two spans, each 55 ft. and 30 ft. wide at Allen's Lane, across Wissahickon Creek. George S. Webster, Ch. Engr., Dept. of Public Works, Bureau of Surveys.

RICHMOND, VA.—We are officially in- formed that permission has been granted the Richmond & Chesapeake Bay Railway Co. to erect the proposed viaduct here.

NORFOLK, VA.—The contract for the building of the double-track steel bridges over the Southern and Eastern branches of the Elizabeth River for the Norfolk & Wes- tern Railway Co. has been let to the PENN- SYLVANIA STEEL CO., of Philadelphia, Pa.

PARKERSBURG, W. VA.—We are official- ly informed that a new bridge is contem- plated across the Little Kanawha River here.

ATLANTA, GA.—Bids are asked by Mayor and General Council, of Atlanta, Ga., until 3 p. m., Feb. 19, for erecting viaduct across the tracks of the Georgia Railway Co. (Ad- vertised, Engineering News.)

BREWTON, ALA.—Bids were opened by the County Commissioners for the construction of bridge across Perdido River at Muscogee, Ala., as follows: Gulf Machine Works, Pen- sacola, Fla., $5,443; Virginia Bridge & Iron Co., Atlanta, Ga., $2,255; Southern Bridge Co., Birmingham, Ala., $3,057; American Bridge Co., 42 Broadway, New York, $3,985.

SHREVEPORT, LA.—Plans are in progress for the erection of a bridge across the Red River at this place, by the St. Louis & Southwestern Railway Co. M. L. Lynch, Tyler, Tex., is Ch. Engr.

MARION, O.—We are officially informed that the Board of County Commissioners, of Marion County will soon advertise for bids for the construction of a 150-ft. span steel bridge, with 16-ft. roadbed and concrete abutments. E. S. Ault is Consult. Engr.

DELAWARE, O.—Bids are asked by F. D. King, County Clk., until noon, Feb. 12, for the construction of a bridge across Delaware Run, in this city.

GREENSBURG, IND.—It is stated that plans are in progress for four bridges to be erected in Decatur County in the near fu- ture. Frank E. Ryan is Auditor.

LAPORTE, IND.—Bids are asked by the Board of County Commissioners until noon, Feb. 6, for building six iron bridges in Laporte County.

PORT HURON, MICH.—We are informed that bids will soon be advertised for the construction of a new bridge across the Black River at Military St., in this city.

HAHNAMAN, ILL.—It is reported that a new steel bridge is contemplated to cross the Winnebago River at this place.

FORT DODGE, IA.—The contract for erect- ing the bridge across the Des Moines River at this place was awarded to the AMERICAN BRIDGE CO., 42 Broadway, New York.

WASECA, MINN.—Bids are asked by C. H. Bailer, County Auditor, until noon, Jan. 30, for the construction of nine steel bridges to be located in Waseca County.

WAYNE, NEB.—Bids are asked by Charles W. Reynolds, County Clk., until noon, Feb. 20, for the construction of all bridges in Wayne County during the year 1906.

JEFFERSON, IA.—The Greene County Board of Supervisors will build a new bridge across the Coon River here.

HUDSON, IA.—The contract for erecting the concrete bridge at this place was award- ed to the MARSH BRIDGE CO., of Des Moines, Ia.

CLINTON, IA.—It is reported that the Chicago & Northwestern Railway Co. will erect a new bridge across the Mississippi River here. E. C. Carter, Chicago, Ill., is Ch. Engr.

YANKTON, S. DAK.—We are officially informed that bids will soon be asked for the construction of all bridges in Yankton County during the year 1905.

CUSTER, S. DAK.—Bids are asked by W. A. Nevins, County Auditor, until noon, March 31, for constructing a 40-ft. bridge over French Creek, at this city.

LIVINGSTON, MONT.—The contract for constructing a bridge across the Yellowstone River, at the mouth of Mill Creek, near this city, was awarded to JACOB F. SOHL, of Livingston. Cost, nearly $5,000.

PINE BLUFF, ARK.—A committee has been appointed to consider the construction of a new bridge across the Arkansas River, in this city. Hon. E. J. Kerwin, County Judge, is Chn. Com. Leo M. Andrews, Pine Bluff, is interested.

DANVILLE, ARK.—We are officially informed that the contract for erecting five bridges in Yell County has been awarded to the CONVERSE BRIDGE CO., of Chattanooga, Tenn., for $38,850.

AMARILLO, TEX.—We are informed that the city has voted to build a $20,000 bridge here.

CHANDLER, OKLA.—Bids are asked by the County Clerk of Lincoln County until Feb. 3 for the construction of a 60-ft. span bridge here.

DENVER, COLO.—Tentative plans have been drawn for a viaduct at 18th St., in this city. John S. Flower, of Denver, is interested.

AGUILAR, COLO.—The contract for erecting a bridge across the Apishapa River here was awarded to the PUEBLO BRIDGE CO., of Pueblo, Colo.

TUCSON, ARIZ.—See under Water Supply.

COLFAX, WASH.—Bids are asked by H. H. Wheeler, County Auditor, until noon, Feb. 7, for the construction of a new bridge across Union Flat Creek, near Colton, Wash. The new bridge will be 60-ft. span, combination, 18 ft. wide.

NEWBERG, ORE.—It is reported that the Willamette Traction Co. will construct a $150,000 bridge across the Willamette River here.

FRESNO, CAL.—The construction of a concrete bridge across the San Joaquin River, near Herndon, is reported to be receiving some consideration by the County Commissioners.

ST. BONIFACE, MAN.—A new bridge across the Seine River is reported to be under consideration here.

CALGARY, ALBERTA.—A $50,000 steel and concrete bridge will be erected over the Bow River at Calgary, by the Alberta Government.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—HORTON & HEMINWAY, 683 Atlantic Av., Boston, have been awarded contract for office building at 116-120 Franklin St., to cost about $250,000 for the John Hancock Mutual Life Ins. Co. Shepley, Rutan & Coolidge, Ames Bldg., Boston, are Archs.

C. A. DODGE & CO., 8 Beacon St., Boston, have been awarded contract for the new building on Commercial St. for Nathaniel Tufts Meter Co., to cost about $100,000. Bowditch & Stratton, 7 Water St., Boston, are Archs.

PROVIDENCE, R. I.—It was announced by W. H. P. Faunce, Pres. Brown University, that Andrew Carnegie had given Brown University $150,000 toward a new library to be named the John Hay Library. The cost of the building will be $300,000, the remaining half of which will be raised by Brown's alumni and friends.

NEWPORT, R. I.—Bids have been received for the construction of a 5-story brick, stone and marble hotel for George H. Weaver, in this city. Luther C. Greenleaf, 101 Tremont St., Boston, Mass., is Arch. Cost, $50,000.

A movement is on foot in this city for the erection of a building for the Newport and Army and Navy Young Men's Christian Association. The proposed building will cost about $150,000. It is stated that Miss Helen Gould, 579 Fifth Ave., New York, is at the back of the enterprise.

NEW HAVEN, CONN.—Victor M. Tyler, of this city, is reported to have ordered plans drawn for a $60,000 residence on Prospect St., New Haven.

BRIDGEPORT, CONN.—The Bridgeport Theater Co. has been incorporated and will build a $50,000 theater on Main St., near High St.

BROOKLYN, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., Jan. 29, for the construction of addition to Public School No. 30, on Conover St., between Wolcott and Sullivan Sts., Boro. of Brooklyn.

Bids were opened by C. B. J. Snyder, Supt. School Bldgs., for the construction of addition to Public School No. 83, Boro. of Brooklyn, as follows: P. J. Walsh, 543 Fifth Ave., New York, $173,989; Thomas McKeown, 521 West 110th St., New York, $175,973; Charles H. Peckworth, 415 Hudson St., New York, $176,774; G. Driscoll, 391 Fulton St., Brooklyn, $148,261; Acri Construction Co., 99 Broadway, Brooklyn, $179,500; George Hilderbrand, 38 Park Row, New York, $181,400; W. P. McGarry, 236 Huron St., Brooklyn, $183,649; W. Werner, 892½ Forrest Ave., New York, $183,649; Guidoni & Gilardi, 1 Madison Ave., New York, $183,750; Peter Cleary, 235 Bainbridge St., Brooklyn, $188,958; H. M. Weed & Co., 124 West 45th St., New York, $189,900; Thomas Cockerill & Son, 147 Columbus Ave., New York, $192,000; **F. H. Berlenbach, 36 Suydam St., Brooklyn, $199,900.**

NEW YORK, N. Y.—The contract for erecting the new bank and office building on South William and Stone Sts., New York, for J. & M. Seligman & Co., 21 Broad St., was awarded to the GEORGE A. FULLER CO., 949 Broadway, New York. F. H. Kimball, 71 Broadway, is Arch.

NEW YORK, N. Y.—We are officially advised that plans are out for figures for a 6-story and basement stable on East 46th St., for Schwarzchild & Sulzberger, 45th St. and First Ave., New York. The building will be fireproof, brick, stone and steel, 100 × 100 ft.

NEW YORK, N. Y.—Bids are asked by Moses Herrman, Pres. Park Board, until 3 p. m., Feb. 1, for installing underground cables, interior wiring and fixtures in New York Zoological Park, in Bronx Park, New York.

Bids are asked by Louis F. Haffen, Pres. Boro. Bronx, until 11 a. m., Feb. 8, for the construction of court-house at public square bounded by Brook and Third Aves. and 161st St., Boro. of Bronx, New York.

Bids are asked by John F. Ahearn, Boro. Pres., until 3 p. m., Jan. 29, for installing electrical work in the Jefferson Market Police Court, at Tenth St. and Sixth Ave., Boro. of Manhattan.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., Jan. 29, for general construction of addition and alteration to Public School No. 32, at 357 West 35th St., Boro. of Manhattan.

NEW YORK, N. Y.—We are officially informed that plans are completed for the construction of a 10-story addition to hotel at 18-24 East 29th St., New York, for the Roy Realty Co., 141 Broadway. Charles T. Mott, 35 West 31st St., New York, is Arch.

Plans have been completed and the general contract has been awarded but not signed for extensive alterations to the Hoffman House, 24th St. and Broadway, New York. R. L. Daus, 150 Fulton St., is Arch.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., Jan. 29, for installing electrical equipment in Public School No. 65, on Forsyth and Eldridge Sts., Boro. of Manhattan.

NEW YORK, N. Y.—We are officially informed that bids are being taken by Myles Tierney, 2 Lafayette Place, New York, until noon, Jan. 29, for the construction of kitchen, dining hall, storage-house and power house for the Mission of the Immaculate Virgin, at Pleasant Plains, Staten Island. The dining hall will be two stories, 225 × 51 ft.; the kitchen will be two stories, 72 × 138 ft., and the power house, one story, 58 × 136 ft., with an extension 34 × 105 ft. The construction will be brick, stone and steel, nonfireproof, with reinforced concrete footings. R. F. Almiral, 51 Chambers St., New York, is Arch.

BUFFALO, N. Y.—It is stated that improvements are to be made to the Technical High School, on Elm St., in this city, by adding another building. Henry P. Emerson, Buffalo, N. Y., is interested.

We are officially advised that plans are in progress for a new 7-story fireproof storage warehouse, on Broadway, between Ellicott and Washington Sts., Buffalo, for the Harberstro Estate. The building will be 60 × 130 ft., cost $75,000. Esenwien & Johnson, 777 Ellicott St., Buffalo, are Archs.

ALBANY, N. Y.—The Albany Homeopathic Hospital Association has secured a site on North Pearl St., Albany, where a $100,000 building is contemplated to be located.

WHITE PLAINS, N. Y.—The erection of a $50,000 Y. M. C. A. building in this city is receiving some consideration. George Burbank, W. E. Longee and Frank Clarke are interested.

GOWANDA, N. Y.—Bids are asked by T. E. McGarr, Secy., State Commission in Lunacy, Albany, N. Y., until 3 p. m., Feb. 7, for alterations and additions to State Homeopathic Hospital, Gowanda, N. Y. (Advertised, Engineering News.)

YONKERS, N. Y.—Plans are in progress for a new brick school building here. Edwin A. Quick & Son, Yonkers, N. Y., are Archs.

MT. VERNON, N. Y.—Bids are asked by E. F. Bienvenue, Clk. Board of Education, until Feb. 5, for the construction of school building here. Boring & Tilton, 32 Broadway, New York, are Archs.

SYRACUSE, N. Y.—Plans have been completed for the new 4-story dormitory for Syracuse University. The new building will accommodate 150 students. Construction will be brick, stone and terra cotta. James R. Day is Chancellor.

HUNTINGTON, PA.—We are officially advised that plans have been completed and the owners will soon ask for bids for the construction of a brick and stone library building here for Juniata College. The new building will be three stories, 100 × 300 ft. M. B. Brumbaugh, Huntington, Pa., is Pres. Boring & Tilton, 32 Broadway, New York, are Archs.

PITTSBURG, PA.—We are officially informed that plans for the synagogue for the Rodeph Shalom congregation are out for figures. The new building will be two stories, 96 × 100 ft., brick, stone and terra cotta. Palmer & Hornbostle, 62 William St., New York, are Archs.

The contract for constructing four 8-story brick and steel warehouses on Wood St., for I. & H. Kaufman, was awarded to the WILLIAM KERR'S SONS CO., of this city. Charles Bickel, 524 Penn Ave., Pittsburg, is Arch.

McKEESPORT, PA.—Plans are completed for a 5-story theater, 92 × 140 ft., for T. L. White. The building will be constructed of glazed brick, sandstone, marble, granite and terra cotta. H. L. Lohman, 502 Fifth Ave., McKeesport, is Arch.

WAYNE, PA.—Plans are in progress for a new 3-story telephone building here for the Delaware & Atlantic Telephone Co., 17th and Filbert Sts., Philadelphia.

WEST CHESTER, PA.—The appropriation for the new armory for Co. A, of this city, has been granted. Preparations for such a building is now under consideration.

PHILADELPHIA, PA.—Plans have been completed for three additional stories to the office building at 1420 Chestnut St., Philadelphia. It will be brick and steel, 45 × 200 ft. Hewett Bros., 671 Bullitt Bldg., Philadelphia, are Archs.

The contract for constructing the 15-story hotel on Broad St. has been awarded to DOYLE & DOAK, Philadelphia, Pa. The building will cost about $3,000,000. The general contractors are receiving bids on all sub-contracts. Henry Ives Cobb, 42 Broadway, New York, is Arch.

NORRISTOWN, PA.—The congregation of the Central Presbyterian Church, of this city, will erect a new building costing $56,000, it is reported. Rev. J. Allen Crawford is Pastor.

POTTSTOWN, PA.—The first armory to be built from the $250,000 appropriation will be built at Pottstown, Pa., for Co. A of the Sixth Regiment.

BALTIMORE, MD.—Bids are asked by Jas. Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until 3 p. m., Feb. 14, for installing hydraulic lifts in United States Custom-House, at Baltimore, Md. (Advertised, Engineering News.)

ANNAPOLIS, MD.—Bids are asked by Truman H. Newberry, Asst. Secy., Navy Dept., Washington, D. C., until noon, Feb. 14, for altering and remodeling present boat-house into a gymnasium at the United States Naval Academy, Annapolis, Md. (Advertised, Engineering News.)

WASHINGTON, D. C.—Plans are in progress for a group of hospital buildings for the Armory Dept. The buildings will be three stories, brick and stone. Cost, $300,000. Marsh & Peters, 520 Thirteenth St., N. W., Washington, are Archs.

Specifications are on file at the office of Engineering News, 220 Broadway, New York, for window and door frames at the U. S. Soldiers' Home, Washington, D. C. Bids are asked until noon, Feb. 3. (Advertised, Engineering News, Jan. 18.)

WASHINGTON, D. C.—Bids were opened Jan. 17 by Elliott Woods, Supt. U. S. Capitol, Washington, for interior cut-stone work for the rotunda section, office building, House of Representatives. Bids were permitted on marble, limestone, Caen stone, Chassignelles stone and Aquia Creek stone, as follows: Broderick & Wind, 1 Madison Ave., New York, white marble, $225,000; B. A. & G. N. Williams Co., 4-6 East 42d St., New York, (a) South Dover marble, $190,475, (b) limestone, $86,625, (c) Chassignelles stone, $139,748; Adam Groth & Co., Joliet, Ill., Indiana limestone, monolithic shafts, $74,423; Vermont Marble Co., Proctor, Vermont, white marble, $204,500; Columbia Marble Quarrying Co., Rutland, Vt., white marble, $217,000, Verdura marble, $253,000; Blue Ridge Marble Co., Nelson, Ga., Georgia marble, $198,000, with monolithic shafts, $203,000; Batterson & Eisele, Times Bldg., New York, Caen stone, $140,223, Chassignelles stone, $147,355; Wm. Bradley & Son, Butler and Nevin Sts., Brooklyn, limestone, $89,629, Chassignelles stone, $144,220; Furst & Fanning, 73 Hawthorne St., Chicago, Ill., Bedford limestone, $91,000.

WASHINGTON, D. C.—Bids are asked until noon, Feb. 26, for furnishings and delivering granite for mess hall and dormitory building at U. S. Soldiers' Home. Captain John Stephen Sewell, Engrs., is Constructing Officer. (Advertised, Engineering News.)

WILMINGTON, DEL.—A permit has been granted to the Manufactures Contracting Co., of this city, for the erection of the 12-story bank and office building for the Wilmington Trust Building Corporation. The building will be fireproof, 87 × 142 ft.

COLUMBUS, GA.—A $50,000 industrial school building will be erected at Rose Hill, it is reported. G. G. Jordan is Pres.

MACON, GA.—The Board of Trustees of the Georgia Academy for the Blind has rejected all bids for the construction of the new building. Bids were in excess of the appropriation.

MOBILE, ALA.—The Lyric Theater Co., of this city, has incorporated to build a $100,000 opera-house. Stone Bros., Cora Bldg., New Orleans, La., is Arch.

NATCHITOCHES, LA.—The contract for constructing the United States post-office building here has been awarded to J. E. BARNES & SON, Logansport, Ind., for $48,000.

CHATTANOOGA, TENN.—It is stated that competitive plans will be asked for the proposed passenger station for the Southern Railway Co. here.

MEMPHIS, TENN.—The contract for constructing the McGill building here was awarded to W. A. SUTHERLAND, of Chicago, Ill. Cost, $300,000.

ZANESVILLE, O.—Plans are completed for the erection of the Methodist Episcopal church at this place. It will be two stories and cost $75,000. Badgley & Nicklas, 1273 Euclid Ave., Cleveland, O., are Archs.

CLEVELAND, O.—A committee has been appointed to consider plans for erecting a new club building for the Excelsior Club, of this city. It is stated by M. Rohrheimer, Pres., that about $200,000 will be expended.

CRAWFORDSVILLE, IND.—Bids are asked by Dr. Carl Brown, 121 West Main St., Crawfordsville, until Feb. 8, for the construction of office building on Washington St. W. F. Sharp, 800 South Green St.

GRAND RAPIDS, MICH.—Data for bidders for proposed hydraulic elevator to be installed in city hall may be seen at offices of Engineering News, at New York, Washington and Chicago. John L. Boer, City Clk., informs us that the specifications must be furnished by the bidders themselves. This work is advertised in Engineering News. Bids are asked until March 5.

CHICAGO, ILL.—Bids are asked by E. J. Brundage, Pres. Board of Comrs., of Cook county, 218 La Salle St., Chicago, Ill., until 1.30 p. m., Feb. 5, for the following work on the construction of court-house: General work, marble, mosaic and tile; mats, hardware, mail chute; heating system, compensator, plant, pumps, tanks and piping, generators, switchboard, vators, hydraulic elevators, conveyors and ash hoists, furnaces and setting. Holabird & Monadnock Bldg., Chicago, are Archs.

CHICAGO, ILL.—The following have been awarded for the building for Charles E. Boulevard and 50th St.: PILSEN FOUNDRY & IRON 22d St., Chicago; heating, CALLAHAN, 155 Washington; Arthur Foster, 1712 Railway Bldg., is Arch.

Plans are in progress for the Hotel on Michigan Ave., and cago. It will be built of cotta, ten stories, 100 × 170 Haynes & Barnett, Frisco Mo., are Archs.

CHICAGO, ILL.—Plans have pleted for the new building Automobile Club, at 243 Chicago, Ill. It will be of and will contain a garage, laurant and grill room. Cost shall & Fox, First National cago, are Archs.

Plans have been completed for apartment house at 1711 for A. W. Greene. It will be 100 × 150 ft., cost $60,000. 108 Dearborn St., Chicago, is A

The contract for the erection Building at Dearborn and Van Chicago, was awarded to the STARRETT CO., 49 Wall St., N

EVANSTON, ILL.—Plans have pleted for a church at Hinman St. Luke's Episcopal Church. It story, Bedford stone front, slate heat and hardwood finish. Cost John Sutcliffe, 218 La Salle St. is Arch. Rev. George C. Stewart

LAKE FOREST, ILL.—Plans have been completed for a dormitory building for Lake Forest College, to cost about $30,000. Frost & Granger, 806 The Temple, Chicago, are Archs.

DES MOINES, IA.—We are officially advised that sketches have been made for alterations and additions to the Flynn building in this city. The alteration is planned will cost $50,000. Martin Flynn, Locust and Seventh Sts., Des Moines, is the owner.

It is reported that the Brotherhood of American Yeoman is contemplating the erection of a building here at a cost of about $60,000. Henry Lehman, Des Moines, is Chn. Com.

FERGUS FALLS, MINN.—We are officially informed that plans will soon be asked for the construction of a nurses' dormitory for the Fergus Falls State Hospital. Cost about $75,000.

LEAVENWORTH, KAN.—It is reported that a new Masonic Temple will be erected on Fifth and Cherokee Sts., Leavenworth, Kan. Cost, $70,000.

LINCOLN, NEB.—Bids are asked by J. S. Dales, Secy., until 4 p. m., Feb. 1, for constructing a museum building on the University campus. Thomas R. Kimball, McCague Bldg., Omaha, Neb., is Arch.

OMAHA, NEB.—The contract for erecting the 6-story warehouse at Tenth and Jones Sts., for Parfin, Orendorff & Martin, was awarded to E. O. HAMILTON, Bee Bldg., Omaha. John Latenser, Bee Bldg., Omaha, is Arch. Cost, $160,000.

FT. MEADE, S. DAK.—Specifications are on file at the office of Engineering News, 220 Broadway, New York, for installing electric light fixtures in certain buildings at Ft. Meade, S. Dak.

ST. LOUIS, MO.—We are informed that bids will be asked soon for the construction of an 18-story office building for the St. Louis Real Estate Trust Co. Henry Wood, Pres. H. F. Roach, Chemical Bldg., St. Louis, is Arch.

ST. LOUIS, MO.—We are officially advised that the plans for the new $182,000 school building on Union Boulevard, between Fairmount and Cabanne Aves., have been approved. W. B. Ittner, St. Louis, Mo., is Comr. Public School Bldgs.

The following are the lowest bidders for the erection of the new school building, Hamilton and Minerva Sts., St. Louis: Hiram Lloyd Building & Contracting Co., general work, $149,957; Philip C. Ring, plumbing, $18,958; B. F. Sturtevant & Co., ventilating, $16,889; A. Riemann & Co., electric work, $4,856.

ST. LOUIS, MO.—We are informed that the Board of Directors of the Public Library, of this city, has approved plans for the proposed $80,000 building.

LITTLE ROCK, ARK.—We are officially advised that the Pythian Grand Lodge of Arkansas has purchased a site at Third and Center Sts., Little Rock, for the erection of a lodge and office building. Cost, $75,000. B. W. Bartlett, Little Rock, is interested.

PUEBLO, COLO.—Plans are nearing completion for the construction of a 6-story hotel, 72 × 120 ft., for the Prudential Insurance Co. The building will be brick, stone and steel. Cost, $80,000. G. W. Roe, 36 Grand Opera House, Pueblo, is Arch.

WALLA WALLA, WASH.—Bids are asked by W. J. Honeycutt, County Auditor, until 9.30 a. m., Feb. 7, for the construction of county jail building. Henry Osterman, 508 Lincoln St., Walla Walla, is Arch.

SEATTLE, WASH.—We are officially informed that plans are completed and ready for bids for the new armory here. The new building will be of brick and stone, 200 × 256 ft., cost $125,000. Kerr & Ross, Seattle, Wash., are Archs.

POMONA, CAL.—See under Streets and Roads.

PRESCOTT, ARIZ.—We are officially informed that all proposals have been rejected for the plumbing, heating and electric lighting apparatus in the hospital building at the Barracks. Bids will be re-advertised.

WINNIPEG, MAN.—It is stated that Cod-ville & Co., of this city, will erect a wholesale warehouse here, at a cost of $110,000.

It is stated that the Government will erect a new immigration warehouse here. Cost, $60,000. Information may be obtained from Thomas, Secy., Dept. Public Works, Ottawa, Ont., is interested.

It is reported that H. A. Meyer, Scandia Block, Winnipeg, will erect a temperance building at a cost of $30,000.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

BERLAND, ME.—The Foreside Water Co. has been incorporated with capital of $50,000 to supply the towns of Falmouth and Cumberland with water. John M. Goddard, of Falmouth, is Pres. and E. R. Chapman is Treas. and Clk.

CAMBRIDGE, MASS.—It is reported that the city will construct a section of pipe line between Irving St., Watertown, and Newton and Waltham, Mass., at an estimated cost of $300,000. C. H. Thurston is Mayor.

WELLESLEY, MASS.—A special town meeting was held and $10,000 voted for extension of water system.

GROTON, CONN.—Board of Water Commissioners has awarded a contract for an engine, condensers, pumps and piping to the HARRIS CORLISS CO., Providence, R. I., at $5,700.

BROOKLYN, N. Y.—William C. Cozier, Deputy Comr. Water Supply, Gas and Electricity, has asked for $1,290,000 for the construction of a 6-ft. steel conduit from the Ridgewood station to Valley Stream, eight miles, which will increase the water supply for Brooklyn by 16,000,000 gallons a day.

NEW YORK, N. Y.—Bids were opened Jan. 19 for furnishing, delivering and laying a 12-in. flexible joint, subaqueous water main from Barretto Point to Riker's Island and thence to North Brother Island, as follows: J. Cornwell, Jr., 69 East 127th St., New York, $47,439; Louis D. Gregory, 125th St. and First Ave., $65,617; J. H. Locheim, Mint Arcade, Philadelphia, Pa., $61,374.

TONAWANDA, N. Y.—John B. Batt, Supt. Water-Works, and A. P. Smith, City Engr., have been instructed to prepare an estimate of the cost of constructing a 20-in. cast-iron water main in Thompson St., between Main St. and Paynes Ave.

LASALLE, N. Y.—It is stated that the Lasalle Water-Works Co. will increase its capital stock for improvement and extension purposes. Work has begun on plans for a filtration plant.

ATLANTIC CITY, N. J.—The Atlantic City Water Commission plans to spend $100,000 to put a concrete jacket around the 30-in. water main of steel, from the mainland across the meadows, and to spend $500,000 for a reservoir. They also want authority to build a new 30-in. pipe to increase the water supply. J. W. Hackney is City Engr.

HOBOKEN, N. J.—Council has voted to introduce a bill in legislature providing for an appropriation for the extension of the water system.

CAMDEN, N. J.—The Haddon Heights Water Co., 301 Market St., this city, has been incorporated with capital of $25,000 to operate water-works. Incorporators: Charles D. and Wendell E. Stanwood, Philadelphia, Pa.; Thomas J. Hankinson, Haddon Heights, N. J.; Theodore H. Gauer, Nathan J. Bailey and William Rawlings, Jr., of Palmyra, N. J.

STOYSTOWN, PA.—A 30-year franchise has been granted to Edward Smith, of this place, to construct and operate water-works here.

SHARON, PA.—We are officially informed that the Sharon Water Co. will extend its system at a cost of $10,000. Chapin & Knowles, Engrs., Pittsburg, Pa., have prepared plans which call for construction of a steel sedimentation tank, 50 × 30 ft., a concrete pump well and intake chamber, and a 55-HP. pump. P. J. Purcell is Supt.

HAGERSTOWN, MD.—Council is discussing various methods of improving the water supply and municipal ownership of the same.

MANCHESTER, VA.—Committee, appointed by Assembly, to devise means of purifying water supply has reported that a filtration plant should be built to cost about $20,000. C. C. Jones is Chn. Com.

RIVERSIDE PARK, VA.—Bids are asked until noon, Feb. 16, for the extension of the water distribution system at Fort Washington, Md. Lieut. W. R. Vance, C. Q. M., Fort Hunt, Riverside Park, Va.

NORFOLK, VA.—Plans and specifications are on file at offices of Engineering News, Monadnock Block, Chicago, and Home Life Bldg., Washington, for improvements of the coagulating basin of the water system here. Bids are asked until Feb. 1, as noted on Jan. 18.

WHEELING, W. VA.—The water board in its annual report recommends the purchase of a 20,000,000-gallon pump and the construction of a larger reservoir. Wilson Hoge is City Engr.

FORT FREMONT, S. C.—Specifications, plans and bidding sheet are on file at office of Engineering News, 220 Broadway, New York, for the construction of an extension of the water system here. Bids are asked until Feb. 3, as noted on Jan. 11.

BENNETTSVILLE, S. C.—City is considering the construction of water-works and sewerage system, it is reported. Frederick Marshall, Abbeville, S. C., has estimated that about $45,000 would be required for the proposed improvement.

COCHRAN, GA.—Bids are asked until 2 p. m., Feb. 6, for water tower, fire pump, boiler, generator and engine for water and light plant. Arthur Pew, Cons. Engr. W. F. Denham, City Clerk. (Advertised, Engineering News.)

ATLANTA, GA.—$30,000 have been asked by the water-works committee of the council for commencing work on a duplicate water main from the river station to the reservoir. R. M. Clayton is City Engr.

KEY WEST, FLA.—We are officially advised that bids were opened Jan. 15 for labor and materials for construction of one 104,000-gallon concrete cistern, two concrete cisterns, 14,000 gallons each, and enlarging a cistern, as follows: W. W. Ward and John Harms, North Beach, Key West, Fla., $9,488; Welch & Campen, Key West, $9,567; The Snare & Triest Co., 143 Liberty St., New York, $13,510.

NEW ORLEANS, LA.—Bids are asked until noon, Jan. 30, for constructing cypress cisterns at Jackson Barracks, La. Capt. B. T. Clayton, Q. M.

MARKSVILLE, LA.—We are officially advised that the water-works contract for this city was awarded to A. B. SANDERS, of Shreveport, La. U. S. CAST IRON PIPE & FOUNDRY CO., Chattanooga, Tenn., was awarded the contract for pipe; PLATT IRON WORKS, Dayton, O., the contract for pumps; CHICAGO BRIDGE & IRON CO. the contract for tower and tank, and the FAIRBANKS CO., New Orleans, La., the contract for hydrants, valves and valve boxes.

HASTINGS, MICH.—The question of bonding the city for $35,000 for improving the water-works system is to be decided upon by a special election Feb. 10.

ATHENS, MICH.—An election will be held to vote on issuance of $8,000 of bonds for a water system.

WATERLOO, IA.—We are officially advised that the Waterloo Water Co. will need a deep well pump, as well as dynamos and motor for operation 1,300 ft. from station. A clear water basin will also be constructed. J. P. Berry is Supt.

ST. PAUL, MINN.—The water board has ordered laid a number of new water mains, of which 11,205 ft. will be 6-in., 2,030 ft. 12-in., and 670 ft. 16-in. Including the above the board has applications on file for 38,000 ft. of 6-in. mains, 7,300 ft. of 12-in., and 1,670 ft. of 16-in. L. E. Rundlett is City Engr.

MINNEAPOLIS, MINN.—We are officially advised that the following were lowest bidders for furnishing various supplies for water-works, for which bids were opened Jan. 12: For 774 tons 6-in. pipe and 20 tons 8-in. pipe, J. B. Cow & Sons, Chicago, Ill., at $31.15; for 116 tons 12-in. pipe, the U. S. Cast Iron Pipe & Foundry Co., Chicago, at $30.70; for 145 6-in., 8 8-in. and 8 12-in. valves, the National Car Wheel Co., Sayre, Pa., at $11, $17 and $33 respectively; for 82 9-in. hydrants without frost cases, the National Car Wheel Co., at $37; for same with frost cases, the National Car Wheel Co., at $36; for 22½ tons special castings, the U. S. Cast Iron Pipe & Foundry Co. and the N. W. Foundry Co., of this city, at $55. Ellis R. Dutton is Asst. City Engr.

LINCOLN, NEB.—Bids were opened Jan. 15 for furnishing a high duty pumping engine as follows: The Murray Iron Works, of Burlington, Ia., bid on a high duty pump with an efficiency of 125,000,000 ft. lbs. per 1,000 lbs. of dry steam, pump to weigh 143,000 lbs., cross compound, fly wheel, no date set for delivery, at $45,224. The Builders Iron Foundry, Providence, R. I., bid to deliver in eight months, to show an efficiency of 100,000,000 ft. lbs., B. T. U., at $16,480; to develop 120,000,000 ft. lbs., B. T. U., $24,490. The International Steam Pump Co., 114 Liberty St., New York, bid on a Laidlaw-Dunn-Gordon, triple expansion crank and fly-wheel, weight 110,000 lbs., to be delivered in 130 days, guaranteeing 122,000,000 lbs. efficiency steam, or 135,000,000, B. T. U., for $14,462. The same company bid on a Snow pump, to be delivered within six months, to cost $16,373, cross-compound, to develop 125,000,000 ft. lbs., $16,373. The Platt Iron Works, Dayton, O., made two bids of $14,275 and $14,678, on two pumps, either to be delivered within six months, one to develop 120,000,000 ft. lbs. efficiency, to weigh 105,000 lbs., cross compound and fly-wheel. The pump described is at the lowest price named. The Allis-Chalmers Co., Milwaukee, Wis., presented four bids on cross compound fly-wheel pumps, as follows: $15,970, 105,000,000 ft. lbs., six months, to weigh 135,000 lbs.; alternate on this bid, $14,570, to be delivered in five months; $17,820, 120,000,000 ft. lbs., seven months' delivery, weight 150,000 lbs.; $16,420, six months, same as last named.

It is stated that bids are asked until Jan. 27 for furnishing two 1,000,000-gallon high pressure turbine pumps. T. H. Pratt is City Clk.

RAPID CITY, S. DAK.—Bids are asked by F. E. Leupp, Comr. of Indian Affairs, Dept. of the Interior, Washington, D. C., until 2 p. m., Feb. 6, for constructing water plant at Rapid City.

LEWISTOWN, MONT.—Council has instructed O. F. Wasmansdorff, Acting City Engr., to make surveys and estimates for the construction of a gravity-pipe line from Big Spring to the distributing reservoir at this city, a distance of 4½ miles. Vitrified pipe will probably be used on the grade line and spiral riveted, cast iron or wooden pipe on the inverted siphons and pressure pipe. Mr. Wasmansdorff invites correspondence with firms manufacturing such materials with a view to getting estimates. Specifications will be ready about March 1.

JACKSON, MO.—Bids are asked until 8 p. m., Feb. 19, for installing a complete water and light plant. Hiram Phillips, Cons. Engr., Frisco Bldg., St. Louis, Mo. Edward D. Hays, Mayor, Jackson. (Advertised, Engineering News.)

HOBART, OKLA.—We are officially informed that O. E. Noble, of this city, is Engr. for the new water system to be erected here as noted on Jan. 4.

TRINIDAD, COLO.—We are officially informed that the city will advertise for bids for constructing water system after locating the line, which work will be completed about March 1. C. H. Nichols is Mayor.

GUNNISON, COLO.—Bids are asked until noon, Feb. 14, for the construction of a water system with all appurtenances. John J. Huddart, 41 Bank Block, Denver, is Consult. Engr. F. W. Harper, Town Clk.

TUCUMCARI, N. MEX.—S. C. Pandolfo, of this town, has been granted a 50-year franchise to construct and maintain a water system here.

SEATTLE, WASH.—Council has passed resolution to construct water mains in Massachusetts St. from Railroad Ave. to the East Waterway. R. H. Thompson is City Engr.

LOS ANGELES, CAL.—Bids are asked until Feb. 19 for the sale of a franchise to lay and operate a system of water pipes in several streets. C. G. Keyes, County Clk.

PORTERVILLE, CAL.—An ordinance has been passed calling for a special election Feb. 12 and submitting to the voters a proposition for incurring a debt of $50,000 for the purpose of acquiring the system of water-works now owned and operated by the Porterville Water-Works. Robert Horbach is City Clk.

VENICE, CAL.—A syndicate of Los Angeles and Venice capitalists, with Abbot Kinney and Walter R. Wheat at its head, has purchased the wells and pumping plant of the Irwin Heights Water Co., and will spend $100,000 immediately in equipping a water system. The plans of the syndicate is to deepen the three wells recently purchased, to install a modern compound pumping plant, and to run a line of pipe to the site of the present temporary water plant at the nursery in Venice. At this point another and more modern pumping plant is to be installed.

SAN FRANCISCO, CAL.—Bids are asked until 11 a. m., Feb. 6, for the construction of a 10,000,000-gallon reinforced concrete reservoir at Fort Miley, Cal. Col. W. S. Patten, Asst. Q. M. Gen'l.

TUCSON, ARIZ.—The council has passed an ordinance calling a special election Feb. 14 to vote on issuance of $300,000 of bonds, divided at follows: Water department, $175,000; fire department, $15,000; bridges and parks, $10,000.

MONTREAL, QUE.—City is considering the expenditure of $1,000,000 for providing 24-in. water mains for high pressure fire mains. John R. Barlow is City Engr.

VANCOUVER, B. C.—$750,000 are to be expended in providing an alternative water system during the coming year. It is proposed to bring a supply from Seymour Creek. By-laws for the borrowing of $1,000,000 for this and other civic improvements by the issue of bonds will be voted upon.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

NASHUA, N. H.—The board of public works is considering the construction of the Burke St. trunk sewer, which, it is estimated, will cost about $150,000. E. J. Johnson is City Engr.

STAMFORD, CONN.—City, it is stated, will build a new sewage pumping station this year at a cost of about $20,000. Paul Nash is City Engr.

MATTEAWAN, N. Y.—Citizens have voted to expend $5,500 for construction of a sewage disposal plant.

MOHAWK, N. Y.—Bids are asked until noon, Feb. 16, for constructing about 5½ miles of pipe sewers. Bids will be received for the whole work only. Knight & Hopkins, Engrs., Rome, N. Y. D. C. Ford, Pres. Municipal Board. (Advertised, Engineering News.) Specifications are on file at office of Engineering News.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Boro. Pres., until 3 p. m., Jan. 31, for the construction of sewers in Broadway, between 156th and 162th Sts.

NEW YORK, N. Y.—Bids are asked by L. F. Haffen, Boro. Pres., until 11 a. m., Feb. 8, for the construction of storm relief tunnel sewer from the Webster Ave. sewer, near Wendover Ave., in the Mill Brook water shed, Sewerage District No. 33, to the Harlem River, north of High Bridge, Boro. of Bronx.

Bids are also asked until the same hour and day for the construction of sewers in various streets in the Borough of Bronx. L. F. Haffen, Boro. Pres.

CAPE MAY, N. J.—Council is stated to be considering construction of a new sewer system. De Witt D. Barlow is City Engr.

TRENTON, N. J.—Contracts have been awarded to ANTONIO DE LUCIO for construction of drains in two streets at $21,072. C. C. Haven is City Engr.

COLLINGSWOOD, N. J.—The Collingswood Sewerage Co. will increase its stock from $50,000 to $150,000 for the construction of new sewers here.

MERCHANTVILLE, N. J.—Borough council is considering construction of a sewer system and plans are being prepared.

NORWOOD, PA.—A. F. Damon, Engr., Darby, Pa., is preparing plans for a sewer system and macadamized streets for this borough.

ENOLA, PA.—The Enola Sewerage Co. has been incorporated with capital of $25,000 to construct and maintain sewers in this town. The incorporators are B. W. Carskadden, Henry E. Tripler, John F. Culin, A. Robino Smiley and Clayton Stokes, all of Philadelphia, Pa.

ALLENTOWN, PA.—H. F. Bascom, City Engr., writes us that he desires to correspond with parties interested in sewage disposal plants.

HARRISBURG, PA.—Bids are asked by W. H. Lynch, Highway Comr., until Feb. 2, for the construction of sewers in several streets.

WASHINGTON, D. C.—We are officially informed that the following bids were received Jan. 22 for constructing a sewer in Macomb St.: R. J. Beall Construction Co., $2,439; James A. Coyle, $2,890; E. G. Gummel, $3,072. Bidders all of this city.

BENNETTSVILLE, S. C.—See under Water Supply.

ATLANTA, GA.—A resolution, authorizing the city engineer to advertise for bids for sewer works, bids to be opened Feb. 6, has been adopted by the council. R. M. Clayton is City Engr.

ATLANTA, GA.—The sewer committee of the council has rejected all bids on the construction of the Ormie St. trunk sewer. C. L. Chosewood is Chn. Com.

MONTGOMERY, ALA.—Bids are asked until Feb. 5 for the construction of sanitary sewers in several streets. R. S. Williams, City Treas.

LAKE CHARLES, LA.—City is considering the construction of a sewer system, it is stated.

ROCHELLE, ILL.—Bids are asked until Jan. 30 for furnishing material and constructing a sewer system for this city. Iowa Engineering Co., Clinton, Ia., is Engr.

EMMETSBURG, IA.—Bids are asked until 8 p. m., Feb. 15, for the construction of an 8-in. sewer. P. H. Hand, City Clk.

CRESCO, IA.—Bids are asked until 8 p. m., Feb. 15, for the construction of two 8-in. sewers. W. L. Richards, Chn. Sewerage Com.

CHISHOLM, MINN.—It is stated that the contracts for constructing a sewer from the lake to Central Ave., including a septic tank, and for a sewer in Central Ave., were awarded to R. F. BERDIE, at $7,835 and $9,925 respectively. Other bids on the work were as follows: Hibbing Construction Co., $8,255 and $11,700; Crowley Electric Co., $5,500 and $9,740.

NORFOLK, NEB.—It is planned to issue $50,000 of bonds for sewer construction here.

SOUTH OMAHA, NEB.—An ordinance has been presented to council providing for the issuance of $250,000 of bonds for the construction of a sewer system here.

WATERTOWN, S. D.—The construction of a main sewer outlet from Rice St. to the Sioux River is contemplated by the council. Cost, $6,000.

FORT ASSINNIBOINE, MONT.—Bids are asked until 11 a. m., Feb. 19, for construction of a bacterial sewage purification plant at Fort Assinniboine. Capt. J. B. McDonald, Const. Q. M. (Advertised, Engineering News.)

JEFFERSON BARRACKS, MO.—Bids are asked until noon, Feb. 19, for the construction of a 6-in. sewer. W. C. Cannon, Q. M.

MARIANNA, ARK.—Hiram Phillips, Consult. Engr., Frisco Bldg., St. Louis, Mo., has prepared plans for a sanitary sewer system for Marianna, to cost $25,000. Bids will probably be asked in about one month. E. W. King, Secy. Drainage Com.

TULSA, IND. T.—We are officially informed that this city will vote on issuance of $45,000 of bonds for completion of sanitary sewer system about the middle of February. D. B. Merry, Sanitary Engr., of this city, has prepared plans for the same.

CLEVELAND, OKLA.—This city, we are officially advised, will ask for bids about Feb. 1 for the construction of a sewer system. A bond issue of $30,000 was recently voted for this purpose. D. B. Merry, Sanitary Engr., Tulsa, Ind. T., is preparing plans.

KELSO, WASH.—We are officially informed that the contracts for sewer work in this city, noted on Jan. 4, were awarded to the LITTLE FALLS FIRE CLAY CO., Tacoma, Wash., for pipe, at $1,865; and to SECOR BROS., of this city, for construction work, at $1,533.

SEATTLE, WASH.—It is stated that R. H. Thompson, City Engr., will request the council to take steps towards the voting of sewer bonds in the sum of $1,000,000 for the construction of a north trunk sewer.

TACOMA, WASH.—CARLSON & SWANSON have been awarded the contract for construction of a sewer in the Fourth Ward at $16,678.

REDONDO, CAL.—Resolution calling for an $80,000 bond issue for a septic outfall sewer system has been adopted by city trustees.

OCEAN PARK, CAL.—Bids are asked until Jan. 29 for the purchase of $20,000 of sewer bonds by T. G. Smith.

LOS ANGELES, CAL.—Ordinances have been passed by council which provide for sewer construction in a number of streets. H. F. Stafford is City Engr.

OAKLAND, CAL.—Council has voted in favor of a bond issue for the construction of a number of sewers. It is estimated that $300,000 will be required for the work. F. C. Turner is City Engr.

SALT LAKE CITY, UTAH.—We are officially informed that all bids for a storm sewer, noted on Jan. 4, were not opened by board of public works, and awarding of contracts was indefinitely postponed. E. A. Wall is Chn. Pub. Wks.

MEAFORD, ONT.—Davis & Johnston, of Berlin, have submitted a report on a system of sewerage for this town; estimated cost, $9,000.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

NEW YORK, N. Y.—Bids are asked until noon, Feb. 6, for construction of a ventilating monitor for rubbish incinerator and an extension of the incinerator. M. Gibson, Deputy and Actg. Comr. Street Cleaning.

BUFFALO, N. Y.—Francis G. Ward, Comr. Dept. Pub. Works, has recommended to council that he be authorized to prepare plans and specifications for a garbage destructor to cost about $45,000.

TAMPA, FLA.—Council has voted to award contract to the DECARIE MFG. CO., Minneapolis, Minn., for a refuse cremator at a cost of $45,000.

BLOOMINGTON, ILL.—The city council has voted to establish a garbage crematory to cost $14,000. Elmer Folsom is City Engr.

MILWAUKEE, WIS.—The council has instructed the city engineer and building inspector to prepare plans for a garbage plant on the mainland near the harbor to cost $10,000.

GREEN BAY, WIS.—The council is to consider a proposition for the establishment and operation of a city garbage plant under private ownership. W. W. Read is City Engr.

OCEAN PARK, CAL.—City will sell $10,000 of bonds for a garbage crematory.

PRETORIA, TRANSVAAL (South Africa). —Bids are asked by the municipality of Pretoria until March 15 for supplying and erecting a refuse destructor capable of treating 60 tons daily. Particulars may be had by addressing Mosenthal, Sons & Co., 72 Besinghall St., E. C., London, Eng.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—Plans have been presented to legislature for abolition of grade crossings at Harrison Sq. and Neponset. The cost of the former project by raising the railroad tracks was estimated at $836,796 and by depressing them, $937,308. The project at Neponset was estimated to cost $181,000. William Jackson is City Engr.

John F. Fitzgerald, Mayor, has sent to the legislature a bill calling for the construction of a boulevard along the Charles River.

ALBANY, N. Y.—Plans have been prepared for the construction of a new macadam roadway from Schenectady to this city.

NEWBURGH, N. Y.—Plans have been prepared for paving Lander St. at an estimated cost of $27,500. Everett Garrison is City Engr.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Feb. 8, for paving and grading on several streets in the Borough of Bronx. L. F. Haffen, Boro. Pres.

BUFFALO, N. Y.—Bids are asked until 11 a. m., Feb. 2, for paving three streets. Francis G. Ward, Comr. Dept. Pub. Works.

TRENTON, N. J.—Ordinances have been passed providing for the paving of East State St. from Monmouth St. to the city line. C. C. Haven is City Engr.

NORWOOD, PA.—See under Sewerage.

WASHINGTON, D. C.—John Biddle, District Comr., advocates the extension of the asphalt pavement on Massachusetts Av. west of Sheridan circle, a request for which has been embodied in a proposed amendment to the district appropriation bill.

WASHINGTON, D. C.—The District Commissioners are reported to be considering the opening of Fessenden St., northwest, at an estimated cost of $14,000 and the extension of Adams and W Sts. at an estimated cost of $7,500.

SAVANNAH, GA.—An appropriation of $25,000 has been made for paving here which, it is estimated, will provide for about 40,000 sq. yds. of paving. Murray M. Stewart is Chn. Com.

COLUMBUS, GA.—Bids are asked until Feb. 6 for paving sections of Tenth and Eleventh Sts. aggregating a total area of about 5,000 sq. ft. W. C. Campbell, Supt. Pub. Works.

UNIONTOWN, ALA.—Citizens have voted to expend $20,000 on construction of pavements.

NEW ORLEANS, LA.—The New Orleans Land Co. has awarded a contract to the GRASSER CONTRACTING CO. to grade, drain and improve the land owned by the company in the rear of the city. A shell road will be built to Bayou St. John, a distance of five miles.

CHATTANOOGA, TENN. — Contract has been awarded to the SOUTHERN PAVING & CONSTRUCTION CO. for paving work at $7,984.

UNION CITY, TENN.—Obion County is reported to be considering the issuance of $100,000 of bonds for road improvements.

LEXINGTON, KY.—We are officially informed that city will pave about 12,000 sq. yds. with creosote blocks at an estimated cost of $30,000. J. White Guyon is Asst. City Engr.

CLEVELAND, O.—Bids are asked until Jan. 31 for the paving and grading of a number of streets in this city. W. J. Springborn, Pres. Bd. Pub. Service.

CLEVELAND, O.—The OHIO ENGINEERING CO., of Lorain, O., has been awarded the contract for paving the Coe Ridge road for $174,000.

Plans have been prepared for the new Edgewater-Brookside boulevard, south of Lorain Ave., at an estimated cost of $375,000.

DAYTON, O.—The commissioners of Montgomery County awarded the contract for macadamizing the Dayton and Lebanon pike to HOGLEN & GERHART. Their bid was 25 cts. per cu. yd. for excavation, $1.10 per cu. yd. for Knap stone and $1.60 per cu. yd. for crushed stone.

KENT, O.—It is stated that estimates have been made for paving East Main St., from Water to Lincoln Sts. The approximate cost is $20,000. Fred. Bechtel is Village Clk.

DELHI, O.—Bids are asked until noon, Jan. 30, for improvement of Washington Ave. by grading, curbing and constructing cement sidewalks. Thomas J. Logan, Village Clk.

GREENSBURG, IND.—Bids are asked until Feb. 5 by the commissioners of Decatur County for the construction of about 23,000 ft. of macadam roads.

BAY CITY, MICH.—City is considering the paving of Broadway as far as Fremont Ave. at an estimated cost of $60,000.

KNOX, IND.—We are officially informed that the contract for the construction of about 20 miles of gravel roads in Stark County has been awarded to PRETTYMAN & GIBBS, of this city. Lee M. Ransbottom is County Auditor.

DETROIT, MICH.—Bids are asked until 10 a. m., Jan. 26, for furnishing asphaltic oil, binder stone and limestone dust. J. J. Haarer, Comr. Dept. Pub. Works.

DETROIT, MICH.—It is stated that bids are being asked for paving Belle Isle bridge with creosoted lumber or common lumber. $40,000 is the estimated cost of the improvement. J. J. Haarer, Comr.

PENTWATER, MICH.—We are officially informed that F. F. Wetmore, County Surv., has prepared plans for about 26,000 sq. yds. of paving in various townships in Oceana County. Dates for opening bids have not been set as yet.

PEORIA, ILL.—Estimates have been prepared for paving three streets with brick and asphalt at a cost of about $17,500.

RHINELANDER, WIS.—Bids are asked until 2 p. m., Feb. 15, for paving about 12,200 sq. yds. Richard Reed, H. F. Steele, Emil Johnson, Bd. Pub. Works.

ST. PAUL, MINN.—L. E. Rundlett, City Engr., has prepared estimates on the cost of paving Second St., from Wabasha to Jackson. Vitrified brick will cost $13,596; asphalt, $14,485; creosote blocks, $17,346; sandstone, $17,596; granite, $18,596; sand-lime brick, $19,596.

WICHITA, KAN.—A resolution to pave Lawrence Ave. with vitrified brick has been passed by council. H. J. Harding is City Engr.

INDEPENDENCE, MO.—J. C. BROWN has been awarded the contract for grading 1½ miles on the Blue Springs and Tarsney Roads at 15 cts. per cu. yd. for excavation and $3.75 per cu. yd. for culvert masonry. The following bids were received for macadamizing about five miles of the Hickman Mills and Blue Spring Roads: John May, $1.49½ a sq. yd.; Samuels & Holmes, $1.73 a sq. yd.; George W. Shaw, $1.65 a sq. yd.; John Brivenden, $1.60 a sq. yd.; Colyer Bros., $1.70 a sq. yd.; Thomas B. Hagan, $1.12½ a sq. yd.

INDEPENDENCE, MO.—The county court has instructed Oscar Koehler, County Surv., to furnish the court with a profile and estimate of the cost of grading about five miles of the Woods' chapel and Blue Springs road.

LITTLE ROCK, ARK.—The contract for paving West 18th St. was awarded on Jan. 11 to the ARKANSAS ROCK ASPHALT CO. for sheet asphalt at $9,250. Other bids were as follows: Mississippi Valley Construction Co., brick, $8,630; Arkansas Rock Asphalt Co., $9,839; asphalt, $8,586; asphaltic-macadam, $7,533; Southern Bitulithic Co., bitulithic, $8,951; bitulithic-macadam, $8,577; Joseph McCoppin Co., brick, $10,128.

DALLAS, TEX.—Bids are asked until Jan. 29 for constructing the Garland and Sachse Road. G. T. Fearn, County Auditor, F. Uhl, Engr.

TULSA, IND. T.—Estimates will be made for paving First St. with asphalt and bids will be asked when estimates are completed.

OKLAHOMA CITY, OKLA.—The plans and specifications for the paving of North Robinson Ave., Thirteenth and Broadway have been adopted and the city clerk instructed to advertise for bids. W. C. Burke is City Engr.

DENVER, COLO.—Plans and specifications have been prepared for the improvement of a number of streets in Dist. No. 1. $37,425 is the estimated cost. G. E. Randolph is Pres. Bd. Pub. Works.

WENATCHEE, WASH.—Chelan County will advertise March 1 for construction of state road No. 3, known as the Red Mountain State Road, surveyed last summer, to extend over the Cascade Mountains. Specifications have been prepared and $4,500 will be expended.

SEASIDE, ORE.—Members of the council of West Seaside and influential citizens are developing plans for the construction of a six mile, 30-ft. boulevard. It is also intended to put in a sewer system and committee is in communication with W. B. Chase, Engr., Portland, Ore., to locate main sewers and start the work.

KLAMATH, ORE.—C. N. Hawkins, Pres. Klamath Canal Co., has stated that the company would build a 120-ft. boulevard from Fairview addition No. 2 to Upper Lake.

POMONA, CAL.—Board of Trade will call a special bond election for an appropriation of $125,000. Improvements included are city hall and site, $40,000; schools, $40,000; parks, $20,000, and streets, $25,000.

SAN FRANCISCO, CAL.—The board of works has awarded the contract for the paving and widening of Fourth St., from Howard to Freelon, to C. S. HARNEY for $46,034.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

BROOKFIELD, MASS.—It is reported that the M. N. Arnold Shoe Co. will erect a new shoe factory here.

LYNN, MASS.—Hennessey & Thompson, of this city, have purchased a site for two factory buildings for the manufacture of shoes. The building will be of brick and frame, four stories, each 100 × 400 ft.

PASCOAG, R. I.—A plot has been purchased for a 4-story factory building for Paul Schwartz and Samuel Mellor, of this city. The building will be used for the manufacture of worsted goods.

NEW HAVEN, CONN.—Plans are in progress for a new factory building for the Geometric Drill Co., of this city. Brown & Von Beren, 421 Exchange Bldg., New Haven, are Archs.

PELHAM, N. Y.—We are officially informed that the Sanborn Map Co., 11 Broadray, New York, is taking figures from invited bidders on the superstructure of its proposed plant at Pelham, N. Y. The plans show three groups of buildings. The main group contains two 2-story buildings, 50 × 150 ft., and one office building, 50 × 50 ft. The main group will contain a drafting room, printing plant, power plant, warehouse, lithographing and map coloring departments. The construction will be of reinforced concrete. Electric light and steam heat. Kirby, Petit & Green, 35 West 31st St., New York, are Archs. W. R. C. Corson, 36 Pearl St., Hartford, Conn., is Consult. Engr.

CALEDONIA, N. Y.—We are officially informed that the Caledonia Marl & Lime Co., of this city, is in the market for elevators and conveying machinery for its new plant here. Several additional buildings will be built later in the year.

ONEIDA, N. Y.—A site has been selected for a new 3-story and basement factory building and boiler-house for the Oneida Hosiery Co., of this city.

CARNEGIE, PA.—The H. Adler Stove Co., of this city, will erect a new stove factory here, it is reported.

ALLEGHENY, PA.—We are officially advised that the Chester B. Albree Iron Works, Market St., Allegheny, will build a large addition to the present plant for the manufacture of structural iron and steel and iron forgings.

McKEESPORT, PA.—It is stated that extensive additions will be made to the mills and equipment of the National Tube Co.'s plant here. The plans now nearing completion have necessitated an expenditure of about $10,000,000, and the new project will add about $7,000,000 more to the cost.

JOHNSTOWN, PA.—We are officially informed that plans have been drawn for the erection of an addition to the plant of the Central Stove & Manufacturing Co., at Central Ave., Johnstown. Boyd & Myton, Swank Bldg., Johnstown, are Archs.

BALTIMORE, MD.—It is officially announced that the plant of the National Hydraulic Stone Co., Wilkins Ave., Baltimore, will be rebuilt.

LYNCHBURG, VA.—The Craddock-Terry Co., of this city, will erect a shoe factory here. The building will be mill construction and will have about 50,000 sq. ft. of floor space. A sprinkler system of the most modern type will be installed. E. G. Frye, National Bank Bldg., Lynchburg, is Arch.

WINCHESTER, VA.—It is reported that the Crawford Woolen Mills Co., of this city, will enlarge its plant.

POUND, VA.—The Pound Woodworking Co. will build a plant here, it is reported. The main building will be 50 × 150 ft. J. A. Ross, Pound, is interested.

IVANHOE, VA.—The Monongahela Iron & Steel Co., of Pittsburg, Pa., which recently purchased the propery of the New River Mineral Co., will erect a steel plant. Power will be taken from the Ivanhoe River.

RICHMOND, VA.—We are officially informed that bids were opened for the construction of the factory building for the Putney Shoe Co., at Richmond, Va., but no contract was awarded. Carpenter & Blair, 569 Fifth Ave., New York, are Archs.

CHARLOTTE, N. C.—It is stated that the plant of the Virginia-Carolina Chemical Co. will be rebuilt. It was recently destroyed by fire at a loss of $85,000.

SHELBY, N. C.—It is reported that the Shelby Foundry & Machine Co., of this city, will erect a new factory building. Thomas Abernethy, Shelby, is interested.

CHARLOTTE, N. C.—Plans are about completed, it is reported, for the new plant of the J. P. Coats Thread Co., to be located here.

CLARKSVILLE, GA.—The Habersham Cotton Mills Co., of this city, recently incorporated, will remodel the Porter mills and install new machinery. Ludwig & Co., Atlanta, Ga., are Engrs. S. Y. Stribling, Clarksville, Ga., is Pres.

WINDER, GA.—Woodruff Bros., of this place, are reported to be considering establishing a foundry and machine shop here.

MONTGOMERY, ALA.—The Montgomery Traction Co. has bought a lot, and will build a car house and repair shop at an outlay of $30,000. It will have eleven tracks with a capacity of forty cars.

BIRMINGHAM, ALA.—The Republic Iron & Steel Co., of this city, is reported to be contemplating extensive additions to its plant. A. W. Thompson, Birmingham, is interested.

The Barnett Lumber & Mfg. Co., of this city, will erect a new factory, 100 × 150 ft., for the manufacture of sash, doors, frames, etc. A dry-kiln with a daily capacity of 40,000 ft. will also be erected.

ANNISTON, ALA.—The City Hardware Co., of this city, has purchased a site adjoining its present plant, on which to erect a new 2-story brick factory building.

NEW ORLEANS, LA.—T. W. Castleman, of New Orleans, is reported interested in the establishment of a factory here for the manufacture of automobiles.

CHATTANOOGA, TENN.—Price & Evans, of this city, have purchased a site on which to erect a foundry and machine shop. Plans are in progress.

AKRON, O.—A new plant will be erected here, it is reported, by the Adamson Foundry & Machine Co.

BUCYRUS, O.—Bids have been received for the construction of the $100,000 steel plant here by the Bucyrus Steel Castings Co. No contract awarded.

CINCINNATI, O.—Plans are nearing completion for the new factory for the Standard Pulley Co., on Spring St., Cincinnati. The plot is 110 × 170 ft.; the two buildings will be brick and concrete. Boll & Taylor, 1308 First National Bank Bldg., Cincinnati, are Archs.

INDIANAPOLIS, IND.—We are informed that the Prairie Manu... Co., of this city will establish a ... for the manufacture of agricultur... ments. Henry L. Dollman and D. M... walker are interested.

INDIANAPOLIS, IND.—The ... Table & Manufacturing Co., of th... build a factory in this city. ... Eichholtz and M. L. Becker are in...

WARSAW, IND.—It is reported ... erection of a cement mill in this ... ceiving some consideration. M. ... Warsaw, is interested.

TERRE HAUTE, IND.—The Om... Brick Co., of this city, has incorpo... will erect a factory for manufacturi... building blocks and building materia... F. Omara is Pres.

EVANSVILLE, IND.—We are off... formed that the John Smith Hoe & T... of this city, will establish a plant ... the manufacture of hoes and edg... John C. Smith, Evansville, is Pres.

MADISON, IND.—We are offici... formed that the Settlemayer Wood ... Co., of this city, will erect a plant fo... facturing wood stirrups and wood ... John F. Settlemayer, Madison, is Pre...

MOLINE, ILL.—It is stated that th... Incandescent Lamp Co., of this ci... erect a new factory here. No deta... been decided. E. M. Clarke, Moline, Secy.

KEWANEE, ILL.—Plans have be... pleted and bids have been taken for t... struction for the new factory build... the Western Tube Co., of this city. ... plete cost will reach nearly $200,000.

CHICAGO, ILL.—Plans have been ... completed for a 3-story cracker factory, 77 ... ft., for the Acme Cracker Co., 70 North ... Carpenter St., Chicago. James B. Dubelka, 79 South Clark St., Chicago, is Arch.

RACINE, WIS.—Plans have been completed for a 2-story brick addition to the factory of the Belle City Basket Co., of this city. The addition will be mill construction, 116 × 180 ft. E. J. Liegler, c/o Belle City Basket Co., Racine, is Arch.

OSHKOSH, WIS.—We are officially informed that plans have been completed for an addition to the carriage factory of Thomas Seaville, on Church St., Oshkosh. The addition will be three stories, 30 × 100 ft. W. C. Klapproth, Oshkosh, is Arch.

TWO RIVERS, WIS.—The Aluminum Manufacturing Co., of this city, will erect an addition, 60 × 150 ft., of stone and concrete. Plans have been completed.

It is stated that Kahlenberg Bros. Co., of this city, will erect a plant here for the manufacture of marine gasoline engines.

MANITOWOC, WIS.—It is stated that the plant of the Wisconsin Veneering Co. will be rebuilt soon.

CEDAR RAPIDS, IA.—The Pawnee Cereal Co., of Buffalo, N. Y., will erect a new plant at Cedar Rapids, it is reported.

DULUTH, MINN.—It is reported that the American Carbolite Co. has purchased a plot on which it will expend $150,000 for a calcium carbide factory. Equipment will consist of two preheating furnaces, 15 electric furnaces and 15 transformers, to be used in connection with the electrical furnaces to reduce the high voltage and produce low pressure.

FAIRFIELD, NEB.—It is reported that the Nebraska Incubator Co., of this city, will erect a new factory here.

ST. LOUIS, MO.—The United Railways Co. has arranged to carry out the plans for building its own equipment plant. The shops will be located in the block bounded by Grand, Vandeventer, Park and Vista Aves. The gymnasium building for the company's employees will be erected on the same site. The first car shop to be constructed will cost $150,000.

ST. LOUIS, MO.—It is reported that the Newsom Archimedean Plowing Machine Co., of this city, will erect a new plant for the manufacture of machinery.

KANSAS CITY, MO.—We are officially informed that extensive additions are to be made on the packing plant of Schwarzschild & Sulzberger, First Ave. and 45th St., New York, in Kansas City. The new buildings will be fireproof, costing about $200,000.

LITTLE ROCK, ARK.—It is reported that J. H. Murphy, of this city, is interested in erecting a wagon factory here.

HOUSTON, TEX.—It is reported that the Waterman Car & Foundry Co., of this city, will erect a large plant here.

BREMERTON, WASH.—Bids were opened Jan. 20, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of boiler and blacksmith shop building No. 109, for steam engineering, at the Navy Yard, Bremerton, Puget Sound, Washington, as follows: Hastie & Dugan, 517 Washington Bldg., Seattle, Wash., $127,431; Hans Peterson, 1224 Alaska Bldg., Seattle, $106,702; Cotton Bros. & Co., Bacon Bldg., Oakland, Cal., $115,539; T. Ryan, 28 Sullivan Bldg., Seattle, $102,000; Congress Construction Co., 140 Dearborn St., Chicago, $99,876; Megrath & Duhamel, 1308 Third Ave., Seattle, $125,210.

TROPICO, CAL.—It is reported that an additional building will be added to the plant of the Western Art Tile Co., of this place.

NAPA, CAL.—The Foster Bros. Co., of this place, will erect a canning factory here, it is reported.

MONTREAL, QUE.—The Canadian Pacific Railway Co. is reported to have plans in progress for two additions to its shops here. The new buildings will each be 100 × 675 ft., costing about $250,000. W. F. Tye, Montreal, is Ch. Engr.

VANCOUVER, B. C.—It is reported that the Standard Soap Co. of Calgary, Alta., will erect a plant in Vancouver. Patrick Burns is Pres.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

...TE.—Washington, D. C.—See under ...

...OAD TUNNEL.—Galveston, Pa.—...r Railways—Buffalo & Susquehanna ...

...FLE AND DOCK.—Charlotte, N. Y.—...Yates, of Rochester, N. Y., will let ... at once for new coal trestle and ... Charlotte. Est. cost is $100,000.

...GING.—Galveston, Tex.—Bids are ...til 11 a. m., Feb. 23, for dredging ...o Bayou, Tex. Capt. Edgar Jadwin, ... Engrs. (Advertised, Engineering ...

...—Superior, Wis.—It is reported that ...icago, St. Paul, Minneapolis & Omaha ...o. will enlarge its merchandise dock at ... C. W. Johnson, St. Paul, Minn., is ... Engr.

...LLING.—Galveston, Tex.—Bids are asked ...til 11 a. m., Feb. 23, for filling at Fort ...ckett Reservation, Tex. Capt. Edgar ...win, U. S. Engrs. (Advertised, Engineering News.)

...RY DOCK.—Hancock, Mich.—Wm. S. ...Cleaves, Propr. of the Portage Lake Foundry & Machine Works, is reported interested in the construction of a dry dock at Hancock, to cost about $500,000.

...DRAIN.—Iowa City, Ia.—Specifications and bidding sheet for construction of a drain at Iowa City, are on file at office of Engineering News, New York. Bids are asked until Feb. 5. Noted on Jan. 4.

BOILERS.—Buffalo, N. Y.—Bids are asked until 11 a. m., Feb. 2, for furnishing and erecting two vertical boilers at Michigan St. bridge over Buffalo River. Francis G. Ward, Comr. Dept. Pub. Works.

ALARM BELL, STEEL TOWER.—Shreveport, La.—Bids are asked until Feb. 13 for one fire alarm bell, weight to be about 3,000 lbs., and also for a structural steel fire tower. C. G. Rivers is City Comptroller.

STREET SIGNS.—Schenectady, N. Y.—Lewis B. Sebring, City Engr., advises us that this city is about to advertise for street signs and desires styles and prices. There probably will be required about 1,200 signs.

IRON GATES.—Winchester, Va.—Bids are asked until Feb. 14, 2 p. m., by Capt. D. W. Butt, Depot Q. M., Washington, D. C., for construction of ornamental iron entrance gates for the Winchester National Cemetery.

RUBBER HOSE.—Pensacola, Fla.—Bids are asked until Feb. 6, 10 a. m., for furnishing at Navy Yard 1,500 ft. of rubber fire hose. H. T. B. Harris, Paymaster Gen., U. S. N., Bureau Supplies and Accounts, Washington, D. C.

LEVEES.—Vicksburg, Miss.—In a recent report J. T. McClelland, Pres. Fifth Dist. Board, stated that new levees will have to be built at Duckport and probably at Sycamore and Bedford, approximating 1,000,000 cu. yds.

CEMENT.—Montrose, Colo.—Specifications and bidding sheet for furnishing 30,000 bbls. of Portland cement are on file at office of Engineering News, New York. Bids are asked until Feb. 6, as advertised in Engineering News.

FIRE ALARM SYSTEM.—Norfolk, Va.—Plans, specifications and bidding sheet are on file at New York office of Engineering News for fire alarm system at U. S. Navy Yard. Bids are asked until Feb. 10. Noted last week.

CEMENT.—Belle Fourche, S. Dak.—Specifications and bidding sheet for furnishing from 20,000 to 30,000 bbls. of Portland cement may be seen at New York office of Engineering News. Bids are asked until Feb. 6, as advertised in Engineering News.

STEEL LOCK GATES.—Nashville, Tenn.—Specifications and bidding sheet for two steel lock gates, filling valves, etc., for Lock No. 21, Cumberland River, are on file at office of Engineering News, New York. Bids are asked until Feb. 8, as advertised in Engineering News.

SUBWAY.—Newark, N. J.—Two bids were received on Jan. 16 for constructing a 6-tile duct subway, about 900 ft. long, in Green St. The Abbott-Gamble Co., 32 Broadway, New York, submitted bid of $1,682 and the N. Y. & N. J. Telephone Co., 160 Market St., Newark, bid of $1,854.

WHARF IMPROVEMENTS. — Galveston, Tex.—It is reported that the Galveston Wharf Co., of Galveston, Tex., contemplates improvements to its wharf system, which will cost $250,000. It is also planned to build two new piers and to install a system of electric hoists and conveyors.

TEST BORINGS.—New York, N. Y.—Bids are asked until 2 p. m., Feb. 5, for making test borings in the channel and along the shores of the Hudson River, near New Hamburg, N. Y. J. Waldo Smith, Ch. Engr., Board of Water Supply. J. Edward Simmons, Pres. (Advertised, Engineering News.)

DOCKS.—Ann Arbor, Mich.—The Ann Arbor R. R. and the Detroit, Toledo & Iron Ry. companies will build docks in Ann Arbor at cost of $10,000,000, according to a reported announcement made by Eugene Zimmerman. B. S. Warren, 30 Broad St., New York, is Vice-Pres. of both railway companies.

SLUICE GATES.—Los Angeles, Cal.—Bids are asked until 2 p. m., Feb. 28, for construction of sluice gates and regulator gates complete, with piers, bridging and operating machinery for Laguna dam across the Colorado River, ten miles northeast of Yuma, Ariz. E. A. Hitchcock, Secy. Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

CONCRETE SEA-WALL. — Indianapolis, Ind.—Bids are asked until 10 a. m., Jan. 25, by Wabash Realty Co. for construction of a concrete sea-wall on north side of Fall Creek, between Delaware St. and Talbot Ave. This is the beginning of extensive improvements of the property on the north side of Fall Creek up to 28th St., between Central Ave. and Meridian St. Specifications are on file and bids will be received at company's office 2709 North New Jersey St., Indianapolis.

DRAINAGE, ETC.—New Orleans, La.—The New Orleans Land Co. is reported to have awarded to the GRASSER CONTRACTING CO. a contract to drain, grade and improve its land in the west end of the city, at about $156,000. The work includes the bridging of canals at all the street crossings, and construction of a shell road about five miles in length.

CANAL.—North Dakota.—E. A. Hitchcock, Secy. of the Interior at Washington, D. C., has executed a contract and approved the bond of NOBLE & MANN, of Buford, N. Dak., for the construction of Lateral N, of the main canal and lateral system, Lower Yellowstone project, North Dakota and Montana. The contract calls for the excavation of 39,010 cu. yds. of material.

DREDGING.—Riverside, Cal.—We are officially informed that a contract for dredging 125,000 cu. yds. from the Newport Bay channel has been awarded to the NORTH AMERICAN DREDGING CO., of San Francisco, Cal. This excavated dirt will be used for filing a piece of land along the bay front. W. W. Wilson, Pres. of the East Newport Town Co., Riverside, is interested.

RAILROAD CUT, EXCAVATION.—Jersey City, N. J.—It is announced that the Erie Railroad Co. will let contracts within the next few days for the work on the Bergen cut, which is to eliminate the tunnel through which the Erie Railroad now runs outside of Jersey City. There are about 500,000 cu. yds. of rock and 120,000 cu. yds. of earth to be removed. The cut is a part of the Erie's plan for the improvement of its freight and passenger terminals at Jersey City. F. L. Stuart, Ch. Engr., New York.

LEVEES.—New Orleans, La.—Bids were received on Jan. 6 for levee work. Capt. J. F. McIndoe, Corps Engrs., U. S. A., has recommended the following award of contracts: To I. R. Bobbitt, of Shaw, La., for 158,500 cu. yds. earthwork in Arbroth Levee, at 17¾ cts. per cu. yd.; to R. T. Clark, of Natchez, Miss., for 236,700 cu. yds. Picayuneville Levee, 18⅞ cts. per cu. yd., and to A. Leopold, of Phoenix, La., for 107,500 cu. yds. in Fairview and Monsecour Levees, at 17¾ cts. per cu. yd.

CANAL.—Wyoming.—The Secretary of the Interior at Washington, D. C., has awarded a contract to the DEADWOOD CONSTRUCTION CO., of Deadwood, S. Dak., for the construction of about 50 miles of the main interstate canal, in connection with the North Platte Irrigation project, Wyoming and Nebraska, at $309,351. The contract calls for the construction of what is known as sections one, two, three, four, five and six of the canal, involving about 3,000,000 cu. yds. of earthwork and 130,000 cu. yds. of rock work. According to the terms of the contract the work must be completed by Dec. 31, 1906.

CANAL.—Billings, Mont.—Bids were received from the following firms on Jan. 15 for Division I, main canal, Huntley project: Nick Hughes and Nelson L. Olson, Butte, Mont., $170,360; Billings Construction Co., Billings, Mont., $192,070; P. McDonnell, Duluth, Minn., $194,760 (bid was informal); Cotton Bros. & Co., Oakland, Cal., $195,020; Cook Construction Co., Des Moines, Ia. (upon condition that whole contract be awarded to this company), $219,680. H. N. Savage is Superv. Engr. and E. G. Hopson, Con. Engr., U. S. Government Reclamation Service, at Billings. Itemized bids will be given under Contract Prices at an early date.

HARBOR WORK.—Los Angeles, Cal.—We are officially advised that the Los Angeles Dock & Terminal Co. has under construction a deep water harbor within the corporate limits of the city of Long Beach, Cal. The NORTH AMERICAN DREDGING CO., of San Francisco, holds a contract to do all of the dredging, and now has in operation on the ground one suction dredger with a capacity of about 150,000 yds. per month. Other dredgers will be put in operation in the near future, which will increase the capacity to over 300,000 yds. per month. Complete plans have been made for the harbor under the supervision of U. S. Engineers. Dana Burks is Pres., Hellman Bldg., Los Angeles.

STEAMER.—Baltimore, Md.—Proposals to build a new steel freight steamer for the Baltimore Steam Packet Co., for service between Baltimore and Norfolk, have been issued. The steamer is to be 233 ft. long, 33 ft. beam, 23 ft. depth of hold, including two covered decks for freight. The contract calls for a speed of 15 statute miles, with 400 tons of dead weight cargo on board, but the capacity is to be for 750 tons. The machinery is to consist of triple-expansion engines with cylinders 14, 30 and 50 in. in diameter, and 30 in. stroke, with two Scotch steel boilers, each 11 ft. 6 in. in diameter and 11 ft. 6 ins. long, tested to 170 lbs. working pressure. Two pole masts, with fore and aft canvas, are to form an auxiliary feature of the ship. John R. Sherwood is Gen. Mgr., at Baltimore.

WIDENING WATERWAY. — Bellingham, Wash.—The Seattle "Times" states that the U. S. government is to expend about $30,000 for widening the Whatcom Creek waterway at Bellingham and increasing the basin from 200 ft. to 400 ft., inside the Great Northern Railway Co.'s old bridge. Contract is held by the NORTH AMERICAN DREDGING CO., of San Francisco, Cal., under the direction of F. S. Greely, U. S. Inspector of contract work.

Government engineers are also directing the work of dredging the narrows outside of Salmon Bay and widening the channel 100 ft., giving it a depth of 16 ft. at low tide from Puget Sound to the lower lock site of the Lake Washington canal. From the lock site to Ballard the depth at low tide is to be 10 ft., with a basin about 500 ft. wide. The PUGET SOUND DREDGING CO., of Puget Sound, Wash., has the contract for the work, at an expense to the government of about $125,000.

Another important improvement which the government engineers have been compelled to abandon at this time owing to a lack of funds is the dredging of the channel from Hoquiam to Aberdeen, Wash. When bids were recently opened it was found that the work would cost about $50,000, Congress had appropriated only $23,000.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

WATER PIPE.—Honolulu, Hawaii.—Contract for water pipe, amounting to $28,000, has been awarded by the Superintendent of Public Works to the HONOLULU IRON WORKS CO., LTD.

DREDGING. — Guantanamo, Cuba. — Bids were opened on Jan. 20 at the Bureau of Yards and Docks, Navy Dept., for dredging at Guantanamo, Cuba. Item 1 is price per cu. yd. for dredging Section A: Item 2, for Section B; Item 3, for Section C. Bids were as follows: Michael J. Dady, 350 Fulton St., Brooklyn, N. Y.—Item 1, $1.50; Item 2, $6.90; Item 3, 97c. John H. Miller, Key West, Fla.—All items, 59c. Fred S. & A. D. Gore, Old South Bldg., Boston, Mass.—$1 for first 100,000 cu. yds.; 60c. for second; 40c. for subsequent; rock excavation, cost plus 15%; for material placed ashore on south and west sides of Toro Key, 50c. per yd. additional.

PIPE LINE.—Panama.—In connection with the notice in Engineering News last week that the Union Oil Co. has been granted authority to construct a pipe line across the canal zone, is the notice of incorporation of the Union Steamship Co., of which the Union Oil Co. is the largest stockholder. The company is capitalized at $5,000,000. It will have offices in Hellman Bldg., in Los Angeles; Whitehall Bldg., New York, and Mills Bldg., San Francisco. The officers are John Baker, Jr., Pres.; W. L. Stewart, Vice-Pres.; J. S. Torrance, Treas.; G. J. Remington, Sec. and Asst. Treas.; Giles Kellogg, Asst. Treas. The fleet of the company will be increased during the coming year.

SUPPLIES.—Panama.—The Secretary of the Treasury has submitted to Congress an itemized statement, made by the War Department, of the additional $5,340,786 sought by the Isthmian Canal Commission to continue its work for the fiscal year ending June 30, 1906. The estimated miscellaneous purchases in the United States will be about $1,000,000. Of this sum, the chief item, $270,049, is for lumber. Cement and iron pipe are other supplies required. For miscellaneous material purchases on the Isthmus the amount sought is $400,000. The amount asked to pay the Panama Railroad Co. for services and material is $200,000. The estimate for payrolls from April 1, 1906, to July, 1906, is $2,100,000. For new equipment purchases, $1,365,786 is asked.

SUPPLIES.—Panama.—Bids were opened on Jan. 11 at the Isthmian Canal Commission, Washington, for brick, staybolt iron, switch ties, carborundum wheels and powder emery wheel dressers, wrench jaws, ambulance, filing cases, office chairs and band instruments. The following bids are of interest to engineers: 1,000,000 building brick, hard burned, standard size, best quality, c. i. f. Colon—Auburn Shale Brick Co., Auburn, Pa., $20.-750; Hamburg Vitrified Brick Co., Philadelphia, $24,000; Pennsylvania Clay Co., Pittsburg, $30,000. Millhall Brick Works, Lock Haven, Pa., $23,000. William Wirt Clark & Son, Baltimore, $22,000. (a) 50 sets switch ties for No. 7 frog; (b) 50 sets switch ties for No. 9 frog: Panama Lumber & Trading Co., New Orleans—(a), $1,867; (b), $5,920. W. R. Grace & Co., New York—(a) and (b), $10,000. Puget Sound Timber Preserving Co., San Francisco—(a), $6,438; (b), $7,850. Arthur Gamble, Seattle—(a), $6,205; (b), $7,007. Ruddock Orleans Cypress Co., New Orleans—(a), $2,958; (b), $3,599. Southern Sawmill Co., New Orleans—(a), $5,599; (b), $6,799. G. S. Baxter, New York—(a) and (b), $16,-229.15. Staybolt iron, commercial lengths, Tennessee bloom or equal—(a) 500 bars, ¾ in.; (b) 500 bars, 1 in.; (c) 200 bars, 1¼ in.; (d) 50 bars, 1⅜ in.: J. B. Kendall, Washington, D. C.—Total staybolt iron, $1,982. Handlan-Buck Manufacturing Co., St. Louis—(a), $900; (b), $1,160; (c), $708; (d), $221. Halliday Machinery Co., Seattle, Wash.—(a), $600; (b), $825; (c), $510; (d), $150. Manning, Maxwell & Moore, New York—(a), $592; (b), $765; (c), $470; (d), $143. Monongahela Iron & Steel Co., Pittsburg—(a), $720; (b), $960; (c), $576; (d), $192. Ewald Iron Co., St. Louis—(a), $802; (b), $1,050; (c), $682; (d), $194. Fox Bros. & Co., New York—(a), $874; (b), $1,131; (c), $668; (d), $221. Falls Hollow Staybolt Co., Falls Hollow, O.—(a), $810; (b), $1,058; (c), $661; (d), $200.

RAILWAYS.—Philippine Islands.—Bids were received on Jan. 20 by the Bureau of Insular Affairs, War Dept., Washington, D. C., for concessionary grants to be made by the Philippine Government for the construction, maintenance and operation of railroads in the Philippine Islands. The specifications issued by the War Dept. call for the construction of 1,223 miles. The Philippine Government will guarantee for a period not exceeding 30 years the punctual payment by the grantee of interest at a fixed rate, not exceeding 4% per annum, on first lien bonds issued by the grantee to an amount of 95% of the actual cost of the construction and equipment. The government invites, however, proposals looking to the construction of the railroads either without guarantee of interest, or on more favorable terms than provided in the specifications. Bids were opened Dec. 15, but were rejected, and specifications reissued, with slight changes. The bidders at that time were Speyer & Co., a Seattle syndicate, and a New York syndicate, represented by J. G. White & Co. This was fully noted in Engineering News on Dec. 21 and Dec. 28. One bid was received on Jan. 30 from J. G. White & Co., 49 Exchange Pl., New York; William Solomon & Co., Cornelius Vanderbilt, Charles M. Swift & Co., International Banking Corporation, H. R. Wilson & Co. and Heidelbach, Ickelheimer & Co., and two from Speyer & Co., 24 Pine St., New York. The bid of J. G. White & Co. and others applied only to lines seven, eight and nine, on the islands of Panay, Negros and Cebu, respectively, upon terms specified, with the following particulars: The rate of interest, duration of guarantee and per cent. of cost of construction on which bonds will be guaranteed are as suggested by government, 4% for 30 years on 95%. They agreed to construct 100 miles a year, the actual construction and engineering work to be done by J. G. White & Co. The lines to be constructed first are to cover such portions of the routes as afford immediate profit, and the lines themselves are to be located so as to afford best transportation facilities and best develop the resources of the country. The cost of the railroad to be used in computing the amount upon 95% of which bonds shall be issued shall include every expenditure whatever on the islands except contractor's cash profits, which are not to exceed 5%. No expenses outside the Philippine Islands are to be counted, but to cover these expenses 10% of total cost shall be added. If the contract is awarded to J. G. White, etc., the bidders agree to organize a corporation under the laws of some State in the Union. The first bid of Speyer & Co. was for concessions of railway privileges in the Island of Luzon (except Dagupan-Laoag line), without guarantee of interest by the government. The bidders propose to construct and operate under one management 598 miles on the island, including the 208 miles now under operation as the Manila Railway Co. The 390 miles to be constructed include Manila to Batangas, with branches from Calamba to Santa Cruz (five miles) and Santo Tomasio to Lucena (47 miles), a total of 147 miles;

READERS' WANTS Our readers, and others, who are in the market for supplies, machinery, etc., or to award contracts for work, will nearly always find the names of the firms who handle the material they want by referring to our advertising pages. Our advertisers are constantly changing their cards, and for this reason we advise our readers to look over the paper from the front cover to the back cover so as to keep in touch with up-to-date contractors' material, methods, etc. **Mention Engineering News** when writing our advertisers. If, however, you do not find advertised just what you want please write us at once and we will notify the proper firms without delay, and **without charge.—Engineering News can help buyers.**

BRIDGES.—Aurora, Ill.—H. B. Douglas, Mayor, writes us that information regarding reinforced concrete bridges is being secured by the city.

WATER SPRINKLERS.—Wilmington, N. C.—The Universal Oil & Fertilizer Co. is understood to be in the market for sprinklers for fire protection.

SWIMMING TANK.—Buffalo, N. Y.—E. A. Batzen, 310 15th St., writes us that he wants to know the names of firms that install plunge or swimming tanks.

BRICK-MAKING MACHINERY.—Lincolnton, N. C.—J. M. Lackey is understood to be in the market for equipment for a brick-making plant of about 100,000 capacity a day.

STEAM SAND DRYERS.—Buffalo, N. Y.—The Buffalo Paragon Wall Plaster Co., 54 Broadway, Buffalo, writes us that it wants the names of firms who make steam sand dryers.

PORTABLE AIR COMPRESSORS.—Tuckahoe, W. Va.—Shanahan, Turner & Ireland, Contractors, want the address of manufacturers of portable air compressors using gasoline for motive power.

PORTLAND CEMENT, CENTRIFUGAL PUMP AND ENGINE.—Perkiomenville, Pa.—Jas. M. Smith, Contractor, writes us that he is in the market for 1,000 bbls. of Portland cement and a centrifugal pump and engine.

GASOLINE MOTOR CARS.—East St. Louis, Ill.—Geo. H. Meek, Asst. Cy. Engr., writes us that he wants catalogues regarding gasoline motor cars that could be used in place of trolley cars on the ordinary street railway.

WATER-WORKS.—Pekin, Ill.—Geo. H. Lucas, of the Immigration Bureau, Missouri Pacific Ry., writes us that he wants the names of contractors who will install water-works on a franchise plan in a city of 10,000.

RETORTS, ETC.—Norfolk, Va.—G. Dieden, Jr., of the Tidewater Ry., writes us that it is desired to be placed in correspondence with firms making retorts and machinery for the manufacture of tar and tar coal. The plant will be started on a small scale and will be portable.

TRACTION-ENGINES, DISC GANG PLOWS AND HARROWS.—Mexico.—The Mutual Rubber Production Co., 95 Milk St., Boston, Mass., writes us that it wishes to purchase one or more large traction engines for field work, and disc gang plows and harrows for use with the traction engine for use on its plantation in Mexico.

RAILWAY SUPPLIES, PLANTATION EQUIPMENT, MACHINERY, ETC.—Haiti, W. I.—H. Morton Stephens, Asst. Engr., National R. R. Co., of Haiti, Gonaives, Haiti, writes us that the company is in the market for railroad supplies; also cotton, sugar and cocoanut plantation machinery, and it is desired to be placed in correspondence with manufacturers of such material. The gage of road is 3 ft. 6 ins.

from Pasacao to Ligao, Ligao to Tabaco, Ligao to Legaspi, total of 124 miles; Dagupan to Camp No. 1 (25 miles); branches from Manila-Dagupan line as follows: From Manila to Cavite and Naig (29 miles); from San Fernando to Florida Blanca (14 miles); from Dau to San Pedro Magalang (nine miles); from San Miguel to La Paz (10 miles); from Moncado to Humingan (24 miles), and a branch from Mariquina to Montalban (eight miles). The routes specified are intended as approximate only. The bidders agree to commence surveys within 60 days after demand by Philippine Government and complete them within six months. The time of completion is to be 75 miles per year. Gage to be 3 ft. 6 ins., as in existing Manila-Dagupan line, and to be operated by steam, electricity may be used by the permission of the Philippine Government. All material is to be good. The grantee has the right to operate telephone and telegraph lines for railroad and government service, and the government may erect at its own expense four wires on the poles of the company for exclusively government business. Material to be imported is to be exempt from duties and port charges. In lieu of all taxes the grantee is to pay 1½% of its gross earnings even after the 80 years specified by the proposal as limit. The amount to be paid on the Manila-Dagupan line is to be ½ of 1%. Grantee has the right to receive immediate possession of condemned lands. Speyer & Co. intend to incorporate the entire railway system as a corporation under United States laws. In their second bid Speyer & Co. propose to construct the line from Dagupan to Laoag (168 miles), with the maximum guarantee of 4% for 30 years on 95% of cost. They desire the concession, however, only if awarded the other concessions, in which case this line also will be operated as part of the system: The time of construction is to be six years unless extended without conditions; the cost used as basis for the bonds to be the actually invested cash, including contractors' profits, under 15%. No written demands for surveys shall be made until 10 months, but surveys are to commence within 60 days after award. Gage is to be 3 ft. 6 ins., and electricity may be used. A letter from Willard R. Green, representing Hopkins & Hopkins, was read, regretting that no bid could be made because specifications had not been sufficiently modified to make a fair opportunity for bidding. He protested against the taxation of bonds on the Philippine Railroad by the United States, on the ground that it caused great depreciation in their value. No bids were received for railroads on the islands of Levte and Samar. Col. C. R. Edwards is Ch. of Insular Bureau.

CIVIL SERVICE EXAMINATIONS

TRANSITMAN AND COMPUTER.—New York, N. Y.—An examination will be held on Feb. 16, at 10 a. m., for position of transitman and computer. (Advertised, Engineering News.)

ASSISTANT ENGINEER RAPID TRANSIT COMMISSION.—New York, N. Y.—An examination will be held on Feb. 13, 10 a. m., for the position of assistant engineer, Rapid Transit Commission. (Advertised, Engineering News.)

INSPECTOR OF STEEL CONSTRUCTION.—New York, N. Y.—An examination will be held by the Municipal Civil Service Commission, 61 Elm St., New York, on Feb. 15, at 10 a. m., for position of inspector of steel construction. William F. Baker, Pres. (Advertised, Engineering News.)

MACHINIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Feb. 14 for the position of machinist, experienced in printing machinery, especially printing presses, at $1,400 a year, for Bureau of Printing, Philippine Service. Apply for application forms 2 and 1093, amended.

INDUSTRIAL NOTES.

THE AMERICAN STEEL DREDGE WORKS, Logansport, Ind., which was organized by James P. Karr and John D. Rauch, now has its complete plant in operation.

THE B. K. ELLIOTT CO., Pittsburg, Pa., has removed its sales department and general office to 108 Sixth St., and the manufacturing department to the Phipps Power Bldg. The blue-printing room will remain at 904 Lewis Block.

THE SPRAGUE ELECTRIC CO., New York, has furnished complete equipments for heating and ventilating for the new U. S. custom house, Senator Clark's residence and the Redman Bank Building, all in New York City, and for the Town Hall in Meriden, Conn.

THE BUFFALO TESTING LABORATORY, Ellicott Square, Buffalo, N. Y., has recently been organized by Geo. A. Ricker, M. Am. Soc. C. E., to act as inspecting engineers and chemists. M. E. Biggan, formerly with R. W. Hunt Co., has been appointed Manager of the Inspection Bureau.

THE WATER-WORKS EQUIPMENT CO., 180 Broadway, New York states that it has received a notification from Frederick J. Shoyer, Dir. Supplies, Philadelphia, that the contract for all sizes tapping machines from 1½-in. to 48-in. has been awarded to it. This includes the large size machine equipped with gasoline engine.

THE SULLIVAN MACHINERY CO., Chicago, reports the appointment of Mr. H. T. Walsh, as manager for the Pacific coast, with headquarters with Henshaw, Bulkley & Co., at San Francisco. Mr. Walsh has had an extended experience with mining equipment, having represented the Sullivan Machinery Co. in the Rocky Mountain region for a number of years. Henshaw, Bulkley & Co., who have for a long time been the agents of the Sullivan Machinery Co., will continue to carry a stock of Sullivan rock drills and compressors.

MILLIKEN BROS., INC., New York, state that in connection with their new open-hearth steel plant and rolling mill at Milliken, S. I., N. Y., contracts have recently been let for the open-hearth furnaces to Messrs. Alexander Laughlin & Co., of Pittsburg, Pa.; contract for soaking pit furnaces to the H. R. Smythe Co., of Pittsburg, Pa., and the contract for the continuous heating furnaces has been let to the Morgan Construction Co., of Worcester, Mass.

THE TAMAQUA MACHINERY CO., of Tamaqua, Fla., has been dissolved by mutual consent of the copartners, S. G. Seligman and J. B. German. All the property of the copartnership is to be and remain the property of S. G. Seligman, and all money owing to the copartnership is to be paid to S. G. Seligman for his own use. All debts of the copartnership are to be paid by S. G. Seligman. J. B. German is to have the right to do business hereafter on his own account as The Tamaqua Machinery Co. S. G. Seligman, however having no interest or liability in the business.

THE ROBINS CONVEYING BELT CO. has recently opened an office at 749 Railway Exchange Bldg., Chicago, Ill. Mr. C. Kemble Baldwin, the Chief Engineer of the company, is in charge of this office and is prepared to handle all inquiries from parties located in the Middle West. The Robins Conveying Belt Co., of New York, has entered an order for a 30-in. conveyor for a gold dredge in the Oroville District, Cal. Among other orders on hand is one for 24-in. conveyor, 18-in. belt conveyors from the Pratt & Whitney Co., of Hartford, Conn., and for a mast and gaff rig from the Pawtucket Gas Light Co., of Pawtucket, R. I.

THE CANADIAN WESTINGHOUSE CO. has obtained an order from the Vancouver Power Co., of Vancouver, B. C. This order included a 1,500 H.P., 2,200 volt revolving field engine type generator, which will be direct connected to a Pelton water wheel. This is a duplicate of the generatirs now in operation in the power plant of this company and will operate in multiple therewith. The order includes switch boards, air blast transforemrs of 550 K.W. capacity. There is also included in the order a 1,000 K.W. 60 cycle rotary converter to operate 550 volts. This converter will furnish power for railway work and will be controlled direct from the switchboard.

THE PARSON MANUFACTURING CO., 299 Broadway, New York, at its annual meeting elected the following officers: H. E. Parson, Pres.; G. L. Prentiss, vice-Pres.; H. T. Parson, 2d vice-Pres.; H. M. Parson, Chief Engineer; C. H. Parson, Secy. and Treas.; S. H. Parson, Asst. Secy. The company reports that the last year has been exceedingly prosperous. A number of large contracts have been recently closed. This company is the manufacturer of the Parson system of furnace construction. They have recently issued a booklet on combustion in general and Parson system in particular, and an inquiry addressed to their New York office will bring any one interested a copy of the same.

THE ROBINS CONVEYING BELT CO., of New York, has recently secured an order from the Solvay Process Co., Syracuse, N. Y., for 16-in. and 24-in. belt conveyors. These conveyors are intended for use in one of the stone-crushing plants of the above company. Among other orders the Robins Conveying Belt Co. now has on hand is one from the Highland Coal Co., of Somerville, Mass., for a bucket elevator; and one from the Western Engineering & Construction Co., of San Francisco, for a 30-in. conveyor for handling gold tailings. The Robins Conveying Belt Co. has recently opened an office in the Frick Building, Pittsburg. Mr. G. R. Delamater, their Resident Engineer, is prepared to receive inquiries from the vicinity of Pittsburg relating to conveying and hoisting machinery.

THE OTTUMWA BRIDGE CO., of Ottumwa, Ia., successors to the Fair-Williams Bridge & Mfg. Co., has lately gone under new management. The manufacturing facilities are being greatly increased, and it is intended by the new management to cover a much larger territory than heretofore. The states of Illinois, Missouri, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Indian Territory will be covered thoroughly by solicitors, and agencies will be established in other western states. The company states that it will bid for and handle anything in the line of bridges, structural iron work, steel tipples, head frames, and any kind of special work in this line. Already the business has grown to such proportions that as soon as the weather permits buildings will be erected more than double the size of the present building capacity.

THE B. F. STURTEVANT CO., Boston, report the following recent contracts for heating and ventilating equipment: The National Tube Co., McKeesport, Pa., for rolling mills and machine shop, containing over 1,000,000 cu. ft. of space; for the Fairbanks-Morse Canadian Mfg. Co., Toronto, including separate apparatus for machine shop, blacksmith shop and foundry; for Brown & Sharpe Mfg. Co., Providence, R. I.; for Pressed Steel Car Co., McKees Rocks, Pa., for car paint shop containing nearly 4,000,000 cu. ft. of space, and for a similar shop containing over 2,500,000 cu. ft. at the Allegheny, Pa., plant of the same company. The new office building for the Studebaker Bros. Mfg. Co., South Bend, Ind., is to be heated and ventilated by a fan system, the apparatus being furnished by B. F. Sturtevant Co. Orders for generating sets have recently been placed with B. F. Sturtevant Co. by W. D. Byron & Sons, Mercersburg, Pa.; Chas. E. King, Brooklyn, and Old Colony St. R. R. Co., Quincy Point, Mass. Mechanical draft apparatus, manufactured by B. F. Sturtevant Co., is to be installed by Appleton Woolen Mills, Reedsburg, Wis.; Lancaster Cotton Mills, Lancaster, S. C.; Lukens Iron & Steel Co., Coatesville, Pa., and Arnold Print Works, North Adams.

THE CHESTER B. ALBREE IRON WORKS, established in Allegheny, Pa., in 1885, and manufacturers of bridge railings and ornamental iron work for railroads and buildings, and of the Pittsburg pneumatic riveters, has been recently incorporated under a Pennsylvania charter. Additional capital and the erection of a large addition to the works on adjoining land, together with new equipment of the latest design high-speed precision machine tools, will enable the new company, which will be called the Chester B. Albree Iron Works Co., to continue the old lines of work to much greater advantage and to take up the manufacture of the Inertia Valve Pneumatic Tools, invented by Chester B. Albree, which the old company has spent three years in perfecting. The chipping and riveting hammers will be on the market as soon as the additional plant will admit. The new company only starts with the old members, Mr. Chester B. Albree and Ralph A. Albree thoroughly familiar with every detail of the business, but has as its vice-Pres. Sumner B. Ely, who was formerly Mechanical Engineer of the American Tin Plate Co. Among the directors stockholders are Mr. Reuben M. Crucible Steel Co.; Mr. C. F. Holdt, President of the Equitable Meter Co., Frederick G. Ely, of the Pressed Steel Co., as well as other business capitalists. The capital stock, fully paid, is $200,000, and the offices and works will be at the old location, 1116 to 1126 St., Allegheny, Pa.

CONTRACT PRICES

The names of parties awarded contracts are printed in capital letters.

WATER MAINS.—New York, N. Y. Department of Water Supply, Gas & Electricity opened bids on Dec. 28 for laying and delivering and laying water mains in streets in the Borough of Richmond, as follows; Contract 1, (a) Joseph Johnson, 1 Broadway, West New Brighton; (b) Clinton Beckwith, 49 West 27th St.; James P. Graham, Bath Beach:

		(a)	(b)	
2,250	tons of straight pipe	$34.00	$38.00	
80	tons spec. castings	70.00	60.00	
40	tons of gate-valve boxes, manhole heads and covers	70.00	50.00	
10	cu. yds. rock excavation, without blasting, inc. backfilling with earth.	5.00	5.00	
2,100	cu. yds. of rock excavation, inc. backfilling with earth	3.00	3.00	
325	cu. yds. masonry excavation, without blasting, inc. backfilling with earth..	3.50	1.50	
19,000	cu. yds. of earth excavation, inc. backfilling	.90	.40	
10	cu. yds. filling and embankment	.30	1.00	
19,000	lin. ft. 24-in. pipe	.90	.50	
500	lin. ft. 12-in. pipe	.50	.35	
950	lin. ft. 8-in. pipe	.45	.30	
750	lin. ft. 6-in. blow-off pipe	.40	.15	
16	24-in. inside screw gate valves	290.00	265.00	
1	12-in. inside screw gate valve	60.00	40.00	
39	8-in. inside screw gate valves	40.00	25.00	
51	6-in. inside screw gate valves	30.00	15.00	
50	double nozzle standard New York hydrants, inc. lead-lined drain pipe and broken stone for trench	50.00	40.00	
5	cu. yds. brick masonry	12.00	12.50	
5	cu. yds. concrete masonry	7.00	6.00	
5	cu. yds. rubble masonry	6.00	7.50	
5	cu. yds. dry rubble masonry	4.00	5.00	
25	sq. yds. asphalt pavement on concrete foundation and asphalt or artificial stone sidewalk	3.00	4.00	
300	sq. yds. asphalt block pavement on concrete foundations to relay & restore	3.00	2.00	
1,600	sq. yds. granite block pavement on sand base to relay & restore	1.00	.50	
1,700	sq. yds. granite block pavement on concrete foundation & tar & gravel of cement joint	2.00	2.00	
5	sq. yds. vitrified brick pavement on concrete foundation to relay & restore	2.50	2.00	
5,300	sq. yds. macadam pavement to relay and restore	.60	.50	
5	sq. yds. cobble pavement	.30	.25	
5	sq. yds. flagging	.50	1.00	
200	lin. ft. curb and gutter	.40	.10	
40	lin. ft. boxing 24-in. pipe	10.00	5.00	
5,000	ft. B. M. sheet piling & timber (exclusive bed block & wedges) that may be left in the work by order of the engineer	40.00	30.00	
40	lin. ft. insulating and waterproofing for 24-in. pipe complete	5.00	4.00	
5,000	lbs. of rolled steel shapes	.05	.10	
1,000	lbs. wrought iron work	.05	.10	
5	½-in. air cocks	4.00	5.00	
5	cu. yds. cement mortar (1 to 6) for boxing pipe	6.00	5.00	
	Total	$148,719	$133,780	$117,297

WATER MAINS.—New York, N. Y.—Bids on Contract 2 were as follows; (a) Joseph Johnson; (b) Clinton Beckwith:

		(a)	(b)
2,100	tons straight pipe	$34.00	$38.00
60	tons spec. castings	70.00	65.00
40	tons gate valve boxes	70.00	55.00
10	cu. yds. rock excavation	5.00	5.00
2,000	cu. yds. rock excavation	3.00	3.00
600	cu. yds. masonry excavation	3.50	1.50
18,000	cu. yds. earth excavation	.90	.50
10	cu. yds. filling and embankment	.30	1.00
8,500	lin. ft. 24-in. pipe	.90	.60
13,000	lin. ft. 20-in. pipe	.85	.40
100	lin. ft. 12-in. pipe	.50	.35
1,000	lin. ft. 8-in. pipe	.45	.30
650	lin. ft. 6-in. blow-off pipe	.40	.15
5	24-in. inside screw gate valves	290.00	300.00
10	20-in. inside screw gate valves	150.00	150.00
2	12-in. inside screw gate valves	60.00	50.00
40	8-in. screw gate valves	40.00	35.00
43	6-in. inside screw gate valves	30.00	25.00
40	double-nozzle standard New York hydrants, inc. lead-lined drain pipe and broken stone for trench	50.00	50.00
5	cu. yds. brick masonry	12.00	12.50
25	cu. yds. concrete masonry	7.00	6.00
5	cu. yds. rubble masonry	6.00	7.50
5	cu. yds. dry rubble masonry	4.00	5.00
500	sq. yds. asphalt pavement on concrete foundation and asphalt or artificial stone sidewalk	3.75	4.00
1,000	sq. yds. asphalt block pavement on concrete foundations	3.00	3.00
425	sq. yds. granite block pavement on sand base	1.00	.50
1,400	sq. yds. granite block pavement on concrete foundation and tar and gravel or cement joints	2.00	2.00
750	sq. yds. vitrified brick pavement on concrete foundation	2.50	2.00
1,000	sq. yds. of macadam pavement	.60	.50
10	sq. yds. cobble pavement	.30	.25
10	sq. yds. flagging	.50	1.00
125	lin. ft. curb and gutter	.40	.10
80	lin. ft. of boxing for 24-in. pipe	10.00	5.00
30	lin. ft. of boxing for 20-in. pipe	10.00	5.00
5,000	ft. B. M. lumber (exclusive of bed blocks and wedges) that may be left in the work by order of the engineer	40.00	30.00
40	lin. ft. insulating and waterproofing for 24-in. pipe complete	5.00	5.00
1,500	lbs. of rolled steel shapes	.05	.10
1,000	lbs. of wrought iron work	.05	.10
4	½-in. air cocks	4.00	5.00
10	cu. yds. of cement mortar (1 to 6) for boxing pipe in place	6.00	5.00
	Total	$143,792	$131,500

WATER MAINS.—**New York, N. Y.**—Bids received on contract 3 were as follows; (a) Louis D. Gibson, 125th St. and First Ave.; (b) Mint Arcade Bldg., Philadelphia, A. H. Joseph Johnson, 193 Broadway, Brighton, S. I.; (d) Clinton Beckwith, John T. Donovan, New

	(a)	(b)	(c)	(d)	(e)
2,250 lin. ft. eight pipe	$40.00	$33.25	$35.00	$37.00	$31.90
10 tons castings	70.00	67.00	73.00	60.00	61.75
25 valve boxes, manhole heads and covers	70.00	60.00	73.00	50.00	51.50
100 cu. yds. rock excavation	10.00	6.00	5.00	5.00	.01
100 cu. yds. rock excavation	4.00	2.50	3.50	2.50	.05
1,000 cu. yds. masonry excavation	3.00	2.50	4.00	1.00	.01
2,500 cu. yds. earth excavation	1.00	.38	1.00	.40	.18
2,500 cu. yds. filling and embankment	1.00	.38	.40	.50	.10
2,250 lin. ft. 20-in. pipe	.80	.65	1.10	.40	.56
2,000 lin. ft. 16-in. pipe	.80	.52	1.00	.35	.41
3,100 lin. ft. 12-in. pipe	.50	.30	.70	.35	.24
1,000 lin. ft. 8-in. pipe	.50	.20	.60	.20	.17
250 lin. ft. 6-in. blow-off pipe	.50	.15	.50	.15	.14
12 20-in. inside screw gate valves	200.00	150.00	160.00	130.00	145.00
12 16-in. inside screw gate valves	120.00	85.00	120.00	75.00	95.00
10 12-in. inside screw gate valves	80.00	48.00	75.00	40.00	58.00
10 8-in. inside screw gate valves	40.00	28.00	50.00	25.00	35.00
28 6-in. inside screw gate valves	30.00	19.00	35.00	15.00	27.00
2 double-nozzle standard New York hydrants, inc. lead-lined drain pipe and broken stone for trench	50.00	45.00	50.00	40.00	45.00
2,000 cu. yds. brick masonry	15.00	16.00	15.00	.01	11.00
100 cu. yds. concrete masonry	8.00	7.00	8.00	.01	6.00
500 cu. yds. rubble masonry	4.00	5.00	7.00	.01	8.00
500 cu. yds. dry rubble masonry	4.00	2.00	4.00	.01	4.00
500 sq. yds. macadam pavement	.75	.50	.75	.50	.30
500 sq. yds. cobble pavement	.50	.10	.50	.01	.12
500 sq. yds. flagging	.50	.50	.60	.01	.30
500 lin. ft. curb and gutter	.20	.10	.30	.01	.20
600 lin. ft. boxing for 20-in. pipe	15.00	20.00	12.00	5.00	7.00
400 lin. ft. boxing for 16-in. pipe	12.00	16.00	12.00	5.00	5.00
5,000 ft. B. M. sheet piling and timber (exclusive of bed blocks & wedges) that may b eleft in the work by order of the engineer	50.00	20.00	50.00	30.00	.01
60 lin. ft. of insulating and waterproofing for 20-in. pipe complete	5.00	4.00	6.00	4.00	4.00
1,000 lbs. roller steel shapes	.10	.03	.06	.10	.03
1,000 lbs. wrought iron work	.10	.04	.03	.10	.04
5 ¾-in. air cocks	6.00	1.00	1.00	5.00	3.00
10 cu. yds. cement mortar (1 to 6) for boxing pipe	4.00	6.00	7.00	5.00	4.00
Total	$160,986	$123,713	$151,093	$119,790	$105,813

INDUSTRIAL NOTES.

THE ROGERS-SHEAR CO., Warren, Pa., is now erecting a plant on the banks of French Creek within the city limits of Franklin, Pa. It is so situated and equipped with sidings as to give favorable shipping facilities, not alone over the entire Erie system, but also over the Lake Shore and Pennsylvania systems, and has approximately 3,000 ft. of sidings. The mill building proper is of slow-burning construction of Southern pine, dimensions of same being about 125 ft. × 300 ft., with crane runaways throughout. In addition to this, there is a boiler house, 50 × 75, equipped with four boilers of 300 H.P. each, of the safety water tube type; power house 30 × 150 equipped with the most modern engines, dynamos, air compressors and pumps, and numerous minor buildings for storage of supplies, oil, etc. The mill machinery is of special design and built for the express purpose of producing steel bars for concrete reinforcement, of all grades of steel from the soft steels to the high carbon steels. For convenience in changing rolls and handling both finished and raw materials, the mill building is equipped with two electric traveling cranes, one of 30 tons capacity and the other of 15 tons. These cranes have a span the full width of the building and will reach all parts of same, thus enabling the rapid and economical handling of machinery and product.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., state that what is claimed to be one of the largest single orders for machine tools ever given at one time by a single company was recently placed by it to cover a portion of the equipment for the new extensions to their West Allis Works, now under construction. Forty-two machine tools of extra heavy pattern, designed especially for use with high speed steels, and driven by Allis-Chalmers motors, were ordered from the following builders of machine tools: Niles-Bement-Pond Co., Wm. Sellers & Co., Inc., Detrick & Harvey Machine Co., Manning, Maxwell & Moore, etc. The combined weight of these machines, without motors, is about 4,282,000 lbs., or 2,141 tons. About 75 Allis-Chalmers motors of various sizes and aggregating a total of 1,200 HP., will be employed to drive these machines. Fourteen of the new tools are vertical boring and turning mills from 8 to 16 ft. and of extra heavy design. There are five standard shaft lathes and two crank shaft lathes with a swing of from 60 to 125 ins., and 30 ft. between centers; eight planers of various sizes, all of which are the spiral geared type; a 200-ton armature press; also several drilling and boring machines, slotters, etc. In addition to the order for machine tools, 34 electric traveling cranes were ordered at the same time of Pawling & Harnischfeger, for sizes and capacities ranging from 2½-ton wall jib crane up to 60-ton, 78-ft. span cranes with 10-ton auxiliary hoist for the new foundry. The combined weights of the crane ordered is approximately 940 tons.

THE WESTINGHOUSE MACHINE CO., East Pittsburg, Pa., has recently received orders for the Roney mechanical stokers, the largest orders being from the Interborough Rapid Transit Co., 59th St. Power House, New York, to equip 7,200 HP. of boilers; United Railways & Electric Co., Baltimore, 3,600 HP.; Twin City Rapid Transit Co., Minneapolis, 3,300 HP.; Midvale Steel Co., Nicetown, Pa., 3,120 HP.; Helena Power Transmission Co., Butte, 2,700 HP.; Phoenix Iron Co., Phoenixville, Pa., 1,800 HP.; Union Sugar Co., St. Louis, Mo., 1,660 HP.; Am. Car & Foundry Co., Detroit, 1,050 HP.; and St. Louis Portland Cement Co., 1,050 HP. Stoker equipments will also be installed by the Pennsylvania Light, Heat & Power Co., Stanley Rule & Level Co., C. & A. R. R., N. Am. Chemical Co., Firth-Sterling Steel Co., Cedar Point Resort Co., Coshocton Straw Paper Co., and Marion County (Ind.) Court House. The Westinghouse Machine Co. has recently sold 6,130 HP. of its various types of steam engines, the largest order being from the Ill. Steel Co., Chicago, for one 38 and 76 × 54 vertical cross-compound Corliss engine of 3,000 HP. capacity. Of the other types of engines manufactured by this company were sold 1,720 HP. of Standard, 1,150 HP. of Compound, and 200 HP. of Junior. These orders were received from the International Steam Pump Co., Colo. Fuel & Iron Co., S. L. & San F. Ry. Co., Sonneborn Realty Co., Pullman Car Works, Am. Pipe Mfg. Co., Parks Gold Mine, Burgess Electric Co., Wm. E. Peck & Co., Chicago, Milwaukee & St. Paul Ry., and Hotel Walton, Philadelphia.

THE AMERICAN LOCOMOTIVE CO., New York, is reported as securing the following orders: One for 20 10-wheel fast freight locomotives from the Lehigh Valley R. R. The engines will weigh 189,200 lbs., with 150,200 lbs. on drivers; cylinders, 21 × 28 ins.; diameter of drivers, 68½ ins.; straight wide firebox boiler with a working steam pressure of 205 lbs.; total heating surface, 3,269 sq. ft.; 378 charcoal iron tubes, 2 ins. in diameter by 15 ft. and 8 ins. long; firebox, 120¾ ins. by 102 ins.; grate area, 85 sq. ft. The tender will have a capacity of 7,500 gallons of water and 12 tons of coal. The St. Louis & San Francisco Ry. has ordered 25 locomotives. They will weigh 180,000 lbs., with 138,000 lbs. on the drivers; cylinders, 21 × 28 ins.; diameter of drivers, 63 ins.; working steam pressure, 200 lbs. The tender will have a capacity of 6,000 gallons of water. An order for four simple Atlantic, five simple mogul freight and three six-wheel switching locomotives has been received from the Vandalia road, for June, 1906, delivery. The Atlantic locomotives will weigh 184,000 lbs., with 108,000 lbs. on the drivers; cylinder, 21 × 26 ins.; diameter of drivers, 79 ins.; working steam pressure, 200 lbs. The tank capacity will be 7,500 gallons of water, and coal capacity, 24,000 lbs. The mogul locomotive will weigh 182,500 lbs., with 156,000 lbs. on the drivers; cylinders, 21 × 28 ins.; diameter of drivers, 63 ins.; working steam pressure, 200 lbs. The tank capacity will be 7,500 gallons, and coal capacity, 15,000 lbs. The Chicago, Rock Island & Pacific is reported to have ordered 25 locomotives.

THE GREEN FUEL ECONOMIZER CO., of Matteawan, N. Y., builders of fuel economizers, a device for recovering the waste heat in the flue gases from steam boiler plants, some time ago began the manufacture of fans, blowers and exhausters upon a large scale. Recent sales by the Green Fuel Economizer Co. are listed below: Two 310-in. induced draft fans to the Am. District Steam Heating Co., of Minneapolis, Minn.; a 280-in. heating and ventilating fan and heater for Kimberly & Clark, Kimberly, Wis.; two ventilating fans for Public School No. 85, N. Y.; two ventilating fans for the Farr Alapaca Co., Holyoke; a forced draft fan for the Buckeye Engine Co., Providence; an induced draft fan and engine for Geo. E. Kunhardt, Lawrence, Mass.; a forced draft fan and engine for the Standard Silk Co., Phillipsburg, N. J.; a heating and ventilating fan for Public School No. 71, Queens, N. Y.; a forced draft fan for Hind & Harrison, Clark Mills, N. Y.; heater coils for the Gilbert Paper Co., Menahsa, Wis.; heater coils for Shea, Smith & Co., Chicago; a planing mill exhauster for the Whiton Machinery Co., Whitonville, Mass.; a volume blower for the Chandler Planer Co., Fitchburg, Mass.; two induced draft fans to the Delamar Copper Co., Chrome, N. J.; heater coils for the Saginaw Valley Traction Co., Saginaw, Mich.; an economizer, induced draft fan and engine to the Massachusetts Chemical Co., Walpole; two sets of heater coils and ventilating fans for the Atlas Wire Co., South Bartonville, Ill.; an induced draft fan and engine for the Trojan Laundry Co., Troy; heater coils, ventilating fans and engine for the Sherman Envelope Co., Worcester; an induced draft fan and engine for the Aragon Mills, Aragon, Ga.; heater coils and economizer for the Remington-Martin Co., Watertown, N. Y.; an induced draft fan for the Clark Thread Co., Newark; a mine ventilating fan for the Minonk Coal Co., Chicago; a ventilating fan for the U. S. Navy Yard, Portsmouth; heater coils, ventilating fan and economizer for the Diana Paper Co., Harrisville, N. Y.; a forced draft fan and engine for the Am. Thread Co., Willimantic, Conn.; drying apparatus for Hirsh, Stein & Co., Chicago; heating and ventilating apparatus for car barns, Fargo & Moorhead St. Ry. Co., Fargo; an induced draft fan and economizer for the Imperial Paper Co., Sturgeon Falls, Ont.; heater coils, ventilating fan and economizer for the Saratoga Victory Mfg. Co., Victory Mills, N. Y.; two complete induced draft fans, engines and economizers for the Traders' Paper Board Co., Begota, N. J.; ventilating apparatus for the People's Palace, Salvation Army Bldg., Boston. Among recent economizer sales are following: a duplicate economizer for the Western Electric Co., New York; an economizer for the Central Penn. Traction Co., Harrisburg; economizers for the N. J. Worsted Spinning Co., Garfield, N. J.; a "Junior" economizer for the Muskegon P. O., Muskegon, Mich.; an economizer for the State School of Mines, Denver; an economizer for the Frost Paper Co., Norwood, N. Y.; and economizer for Knowlton Bros., Watertown; seven economizers for the Union Station, Penn. R. R., Washington; an economizer for the Jackson St. R. R. Light & Power Co., Jackson, Miss.; an economizer for the Gravesend Pumping Station, Brooklyn.

THE INDEPENDENT ASPHALT ASSOCIATION, representatives of 27 asphalt paving companies and firms operating in various cities of the U. S. and Canada, met in New York on Jan. 17 and effected an organization under the above name. Its objects are: "For the purpose of discussing the various questions of interest to the industry, arising from time to time, and to exchange views as to the best method of extending and developing the business, improving the quality of asphalt pavements and to do all things incidental and conducive to the attainment of the above objects." All reputable firms and companies engaged in the production of asphalts and in the laying of pavements, who are in sympathy with the objects for which the association has been formed, are eligible for membership. Officers were elected as follows: President, A. L. Barber, New York; 1st vice-President, W. H. Kinch, Buffalo; 2d vice-President, David McCormick, Chicago; Treasurer, R. T. Rokeby, New York; Secretary, P. W. Henry, 17 Battery Pl., New York. Executive Committee: Gen. Howard Carroll, New York; P. J. Brennan, Washington; James Pearson, Toronto, Ont.; John H. Gleason, Troy, N. Y.; Andrew Jaicks, Chicago; P. R. Quinlan, Syracuse, N. Y.; R. T. Rokeby, New York; Frank H. Kirchner, Cincinnati; W. V. Cranford, Brooklyn; Hugh Murphy, Omaha, Neb.; M. F. Bramley, Cleveland; R. Y. Filbert, Philadelphia. The following contractors were represented, all of whom became charter members of the association: W. N. Andrews, Hamilton, O.; The A. L. Barber Asphalt Co., N. Y.; Brennan Construction Co., Washington; Constructing & Paving Co., Toronto; Cleveland Trinidad Paving Co., Cleveland; Continental Asphalt Paving Co., N. Y.; Costello & Neagle, Elmira, N. Y.; Henry Dumary, Albany; Cranford Co., Brooklyn; Cranford Paving Co., Washington; Eastern Bermudez Asphalt Paving Co., Brooklyn; Isaac S. Filbert, Baltimore; Filbert Paving & Construction Co., Philadelphia; German Rock Asphalt & Cement Co., Buffalo; Harlem Contracting Co., N. Y.; The A. Jaicks Co., Chicago; Kirchner Construction Co., Cincinnati; John R. Lee, Paterson, N. J.; Mayer Bros., Erie, Pa; Hugh Murphy, Omaha; Parker-Washington Co., St. Louis; Scully Paving Co., Chicago; Sicilian Asphalt Paving Co., New York; E. W. Sutphen, Buenos Aires, Argentina; Warner-Quinlan Asphalt Co., Syracuse; Uvalde Asphalt Paving Co., N. Y.; R. D. Upham, N. Y. Letters expressing sympathy with the purposes of the association and a desire to cooperate with the movement were read from the following contractors: Western Construction Co., Lafayette, Ind.; Southern Paving & Construction Co., Chattanooga; Memphis Asphalt & Paving Co., Memphis; Booth & Flinn, Pittsburg; Southern New Eng. Paving Co., Hartford, Conn.; Narragansett Improvement Co., Providence; Independent Asphalt Paving Co., Tacoma, Wash., and H. P. Pennock & Co., Winnipeg, Man. Many of the representatives present pointed out the demoralized conditions prevailing in the industry, and stated their belief that the character of work now being done was a serious menace to the asphalt business, which was in danger of ultimate ruin and consequent loss of the large capital now invested in the business, unless some move should be made to correct existing evils. It was further stated that asphalt pavement was never so popular as at the present time, but the low prices prevailing induce, and, in many cases, almost compel, contractors to slight their work and to evade specifications wherever possible in order to save themselves from serious and immediate losses, not to mention the future up-keep of the pavement during the long term of guarantee now required. The general opinion was that the desire to cheapen the cost of pavement was fostering and encouraging the use of many artificial, adulterated and otherwise inferior grades of bitumen, and that the specifications adopted by most cities virtually excluded the best materials by permitting open competition with the inferior grades, thereby preventing taxpayers and property owners from getting the best quality of pavement at the start, besides burdening them with enormous expense in the future for the maintenance of the pavements after the term of guarantee shall have expired. All the members of the association expressed themselves in favor of a movement that would be beneficial to the industry and they recognized the fact that any improvement must carry with it corresponding benefits to municipalities and taxpayers, and that this could only be accomplished by improving the quality of the work done and at a price which would be fair to the municipality and yield the contractor a reasonable profit.

THE CONSOLIDATED ENGINEERING & CONSTRUCTION CO., of New York, has opened offices in the old banking rooms of the Syracuse Savings Bank, Syracuse, N. Y. Those interested in the company have devoted nearly seven months in selecting the men best fitted for the various departments. The head men of the company have had no less than 12 years' practical experience in the special line of work to be taken up. The concern has been systematized by experts working in conjunction with the heads of the company. The bookkeeping and auditing department systems have been devised by local experts, aided by the company's men, with the General Audit Co., of New York, acting as consulting experts. The company will take contracts for any class of construction on any reasonable form or contract, but it has especially systematized its entire organization so that it may be placed as a unit at the disposal of an individual or a corporation who contemplates the erection of any piece of construction, whether it be a public building, a dam, etc., a certain fixed amount being agreed upon which the owner is to pay to the company for the privilege. In other words, for example, any owner, whether it be an individual or a corporation, who has not enough construction to permanently maintain a construction department, can obtain the services of the Consolidated on any of its work and get any piece of construction completed at actual cash cost, plus-a-fixed-sum, the fixed sum being paid to the company as its profits. The men interested in this company are W. E. Hamlin, who was for several years with the U. S. Engineer Corps. He later supervised the construction of the foundation for the Boston Mfg. Co.'s plant at Waltham, and of the Augustus Lowell Laboratories for the Mass. Inst. of Tech., and was superintendent in charge of the work which turned the old Bow Ship Canal between Concord and Manchester, N. H., into a power canal for supplying electric light to Manchester. Four years ago Mr. Hamlin was selected by a New York firm to go to Italy for the purpose of estimating and submitting a bid for putting in the foundations of, and re-erecting the Campanile Tower in St. Mark's Square, Venice. He was afterwards New York manager and interested in a larger construction company, with headquarters in New York. J. Everett Polsey, recently of Boston, has also permanently connected himself with this company, and is in charge of its mill department. He was formerly superintendent, and as such reorganized the F. E. Tingley plant at Pawtucket, R. I. He was later connected with the Flexible Door & Shutter Co., of Worcester, Mass., and there organized the uniform system of shop estimating. Later he was connected with the G. W. Harsey Co., Contractors, of Boston, and the J. H. Gerlock Co., Boston. Ivan Kreuger, Chief Engineer, in charge of the concrete department, is a graduate of the Royal Technical College of Stockholm. His first engagement was with J. A. Hartman, of Berlin, Germany, who made a specialty of all concrete structures. Afterwards he was with the Hennibique Co., of Paris. For three years he was with W. Lindgren, of Chicago, during which time he designed and supervised the concrete work which cost a total of over $1,500,000. He was next engaged by Purdy & Henderson in connection with the structural steel frames in the Whitehall Bldg., the Bank of the Metropolis, Wall St. Exchange, the Flatiron Bldg., the Times Bldg., New York; the Bellevue-Stratford Hotel, Philadelphia; Senator Clark's residence, New York, etc. His later connections were with Milliken Bros., of New York, and M. A. Potts & Co., London, and finally as expert engineer on several important pieces of work. J. R. Pierce is in charge of the construction department, and during his experience has had charge of the construction of the Edison Electric Light Plant, Boston; the C. B. Alexander residence, New York; County Court-House, Lawrence, Mass.; the plant of the Simmons Hardware Co., Sioux City. J. F. Phelan and G. R. Kennedy are also connected with the company's office in Syracuse.

EXHIBITS AT THE CONVENTION OF THE NATIONAL CEMENT USERS ASSOCIATION.

The exhibits of materials and machinery at the annual convention of the National Cement Users Association at Milwaukee, Wis., Jan. 9 to 12, were notable for their number and variety. A classified list of the exhibitors is given below:

PORTLAND CEMENT.

Illinois Steel Co. (Cement Department), Chicago.
Sandusky Portland Cement Co., Sandusky, O.
Marquette Cement Mfg. Co., Chicago.
Pennsylvania Cement Co., New York, N. Y.
Newaygo Portland Cement Co., Newaygo, Mich.
Edison Portland Cement Co., Little Village, N. J.
Castalia Portland Cement Co., Pittsburg, Pa.
Lehigh Portland Cement Co., Allentown, Pa.
Chicago Portland Cement Co., Chicago, Ill.
Western Portland Cement Co., Yankton, So. Dak.
Atlas Portland Cement Co., New York, N. Y.
Blanc Stainless Cement Co., New York, N. Y.

CONCRETE BLOCKS AND BLOCK MACHINERY.

Standard Sand & Machine Co., Cleveland, O.
Ideal Concrete Machinery Co., South Bend, Ind.
National Building Block Machinery Co., Milwaukee, Wis.
Stevens Cast Stone Co., Chicago.
Crescent Mfg. Co., Deshler, O.
Eureka Machinery Co., Jackson, Mich.

The Pettyjohn Co., Terre Haute, Ind.
Schoenèman Cement Block Co., George, Ia.
Winget Concrete Machine Co., Columbus, O.
Barker & Nighswander, Toledo, O.
Coltrin Mfg. Co., Jackson, Mich.
Indestructible Post Co., Chicago.
Durolithic Co., Buffalo, N. Y.
American Hydraulic Stone Co., Denver, Colo.
Simplex Mfg. Co., Jackson, Mich.
Anchor Concrete Stone Co., Rock Rapids, Ia.
Perfection Block Machine Co., Minneapolis, Minn.
Usona Mfg. Co., Urbana, Ill.
Besser Mfg. Co., Alpena, Mich.
H. S. Quick & Co., Indianapolis, Ind.
J. W. Stuart, Paris, Ill.
Hayden Automatic Block Machine Co., Waterloo, Ia.
Standard Stone Co., New York, N. Y.
Iowa Building Block Machine Co., Waterloo, Ia.
Century Cement Machine Co., Rochester, N. Y.
Cement Machinery Mfg. Co., Burlington, Ia.
Hartwick Machinery Co., Jackson, Mich.
Automatic Building Block Machine Co., Jackson, Mich.
T. O. Eichelberger Co., Dayton, O.
Miracle Pressed Stone Co., Minneapolis, Minn.
Berthelet Construction Co., Milwaukee, Wis.
Harmon S. Palmer Concrete Block Co., Washington, D. C.
Niles Molding Machine Co., Niles, Mich.
Wisconsin Hollow Concrete Wall Co., Milwaukee, Wis.
O. A. Dever, Cassopolis, Mich.

CEMENT BRICKS AND BRICK MACHINERY.

Reading Brick Machinery Co., Reading, Pa.
Winget Concrete Machine Co., Columbus, O.
T. M. LeHew & Son, Warsaw, Ind.
South Bend Machine Mfg. Co., South Bend, Ind.
H. W. Seamans, Grand Rapids, Mich.
Miracle Pressed Stone Co., Minneapolis, Minn.
Peerless Brick Machine Co., Minneapolis, Minn.
Burnham Cement Brick Machine Co., Milwaukee, Wis.
William Porten Co., St. Paul, Minn.
Helm Brick Machine Co., Traverse City, Mich.
Coltrin Mfg. Co., Jackson, Mich.

CONCRETE AND SAND MIXING MACHINES.

Municipal Engineering & Contracting Co., Chicago.
T. L. Smith Co., Milwaukee, Wis.
Contractors' Supply & Equipment Co., Chicago.
Reading Brick Machinery Co., Reading, Pa.
South Bend Machine Mfg. Co., South Bend, Ind.
Winget Concrete Machine Co., Columbus, O.
Williams Mfg. Co., Chicago.
Standard Machine Co., Columbus, O.
Hartwick Machinery Co., Jackson, Mich.
Eureka Machinery Co., Jackson, Mich.
The Knickerbocker Co., Jackson, Mich.
International Fence & Fireproofing Co., Columbus, O.
Hayden Automatic Block Machine Co., Columbus, O.
Jaeger Automatic Machine Co., Columbus, O.
Besser Mfg. Co., Alpena, Mich.

CONCRETE POSTS, PIPE, ETC.

C. L. Catherman, Elkhart, Ind.—The Ideal post and the Hoosier post making machine.
Indestructible Post Co., Chicago.—Steel posts in concrete bases.
Miracle Pressed Stone Co., Minneapolis, Minn.—Concrete pipe and tile, and steel forms for their manufacture.
Besser Mfg. Co., Alpena, Mich.—Cement tile and sewer pipe and three-piece sewer and conduit.
Century Cement Machine Co., Rochester, N. Y.—Curb and gutter machine for making the work in place.
H. S. Quick & Co., Indianapolis, Ind.—The National post and Monarch fastener for wire on concrete posts.
Simon L. Dunlap, Indianapolis, Ind.—Concrete cisterns and catch-basins, and collapsible steel forms for making them.
Simpson Cement Mold Co., Columbus, O.—Molds for ornamental posts and porch trimmings.
Dever's Cement Works, Cassopolis, Mich.—Molds for ornamental posts, balusters, etc.

REINFORCED CONCRETE.

St. Louis Expanded Metal Fireproofing Co., St. Louis, Mo.
International Fence & Fireproofing Co., Columbus, O.
Northwestern Expanded Metal Co., Chicago.

MISCELLANEOUS.

Chase Foundry & Mfg. Co., Columbus, O.—Drying cars and transfer cars for concrete blocks and bricks.
Cleveland Car Co., West Park, O.—Dryer and factory cars; dump cars; industrial railway track and turntables.
Sterling Wheelbarrow Co., Milwaukee, Wis.—Steel barrows for concrete and mortar, etc.
Eastern Concrete Machine Supply Co., Akron, N. Y.—Clamps for holding molds.
Blaws Collapsible Steel Centering Co., Pittsburg, Pa.—Molds for concrete sewer work.
Miracle Pressed Stone Co., Minneapolis, Minn.—Wheelbarrows, shovels, screens, sieves and sidewalk tools.
Century Cement Machine Co., Rochester, N. Y.—Sidewalk tools.
Northwestern Expanded Metal Co., Chicago.—Steel lath and other specialties.
New Way Motor Co., Lansing, Mich.—Gasoline engines for driving mixers, etc.
Garden City Sand Co., Chicago.—Materials for concrete.
Milwaukee Concrete & Supply Co., Milwaukee, Wis.—Materials for concrete.
Ricketson Mineral Paint Works, Milwaukee.—Coloring materials for mortar, brick, concrete, etc.
R. & R. Chemical Co., Chicago.—Surfacing compound to prevent cement or concrete from sticking to iron or wooden molds.
S. R. Krottnaurer, Chicago.—Composition for waterproofing concrete.
Cement Machinery Mfg. Co., Burlington, Ia.—Coloring and waterproofing for concrete.
Sanitary Chemical Co., Indianapolis, Ind.—Waterproofing solution for concrete.
Henry Wittekind, Chicago.—Designs for concrete houses.
Fairbanks, Morse & Co., Chicago.—Cement testing machines.
Chicago Pneumatic Tool Co., Chicago.—Pneumatic rammers and tampers.
Whitnall & Rademaker Co., Milwaukee, Wis.—Pneumatic tampers.

TRADE PUBLICATIONS.

RAIL BRACES.—Niagara Forged Steel Co., 811 Mutual Life Building, Buffalo, N. Y. Paper; 6 × 9 ins.; pp. 2; illustrated.

These braces are forged from open-hearth steel plates.

CONCRETE BLOCKS.—Ideal Concrete Machinery Co., South Bend, Ind. Paper; 6 × 9 ins.; pp. 48.

This is a collection of reproductions of testimonials from users of the Ideal machines.

CONCRETE POSTS.—C. L. Catherman, Elkhart, Ind. Paper; 6 × 8½ ins.; pp. 4; illustrated.

The Hoosier post-making machine and the Ideal concrete post are described and illustrated. The posts have steel reinforcement.

CONCRETE BLOCKS.—The Iowa Building Block Machine Co., Waterloo, Ia. Paper; 4¾ × 8 ins.; pp. 20; illustrated.

The Iowa machine makes a variety of hollow building blocks, caps, lintels, veneering blocks, etc.

PORTLAND CEMENT.—Western Portland Cement Co., Yankton, So. Dak. Paper; 3½ × 6 ins.; pp. 10.

Testimonials and notes of works on which Yankton cement has been used fill up this pamphlet.

CEMENT WORKERS' TOOLS.—Miracle Pressed Stone Co., Minneapolis, Minn. Paper; 3½ × 6 ins.; pp. 24; illustrated.

This is an illustrated catalogue and price list of trowels, rollers and other tools for sidewalk work; screens, wheelbarrows and a sidewalk tile machine.

WHEELBARROWS.—Sterling Wheelbarrow Co., 238 Oregon St., Milwaukee, Wis. Paper; 5½ × 3½ ins.; pp. 12; illustrated.

Roller-bearing wheels are the special features of these wheelbarrows, which are of wood and iron and built for ordinary and special classes of work.

CONCRETE CISTERNS AND CATCH-BASINS.—Simon L. Dunlap, 3019 Park Ave., Indianapolis, Ind. Paper; 6½ × 3¼ ins.; pp. 8; illustrated.

Collapsible steel forms are used, and the testimonials quoted show that the cisterns and catch-basins are used in a number of cities.

INDUSTRIAL RAILROAD SUPPLIES.—Ernst Wiener, 66-68 Broad St., New York City. Paper; 8 × 11 ins., pp. 44. Illustrated.

This catalogue not only covers industrial and allied subjects, but contains tables and other data which should prove of interest to engineers, contractors and mine operators. Tabulated commercial sizes with specifications, cover rails, spikes, frogs, dump cars and other accessories.

FANS, BLOWERS AND EXHAUSTERS.—The Green Fuel Economizer Co., Matteawan, N. Y. Paper; 3½ × 6 ins.; pp. 8. Illustrated.

A large variety of fans are pictorially illustrated and tabulated specifications of commercial sizes are given. These include pulley or belt driven fans, direct-connected motor-driven fans, and some direct-connected to vertical or horizontal steam-engines. These are applied more particularly to heating, ventilating and mechanical draft.

TANGENTIAL WATER WHEELS.—Abner Doble Co., Engineers, San Francisco, Cal. Exclusive Licensee in California, The John McDougall Canadian Iron Works Co., Ltd., Montreal, Canada. Bulletin No. 7, 1906. Paper; 6 × 9 ins.; pp. 100; illustrated.

Few trade catalogues are prepared with such discriminating intelligence as is shown by this one, which is designed almost as much from the viewpoint of usefulness to the engineer or contractor who receives and uses it as from that of the publisher. The catalogue describes in some detail the tangential water wheels made by the Doble Co., including their needle regulating nozzles, ellipsoidal buckets, ring-oiling bearings, nickel-steel shafts and other accessories. Different types of water wheels and a number of notable hydro-electric power plants of the company's installation are described; some of these plants are of 8,000 and 9,000 HP. and one operates under a head of nearly 2,000 ft. Interesting information regarding installations for college laboratories is given. Among the useful tables and other [illegible] data included in the catalogue are [illegible] Doble water wheel tables, covering [illegible] wers up to a head of 2,550 ft. and capa[illegible] to 5,000 HP.

PROPERTIES OF AMMONIA.—[illegible] Machine Co., Foot of E[illegible] La Verge York City. Paper; 4½ [illegible] 8th St., New ins.; pp. 4; illustrated.

This pamphlet gives the [illegible] rties of ammonia under different temp[illegible] es and pressures, in a tabular form.

CONCRETE MIXER.—Inter[illegible] al Fence & Fireproofing Co., Colum[illegible] O. Paper; 10 × 4¼ ins.; illustrated.

The American mixer here [illegible] has a horizontal drum with rev[illegible] shaft and blades, and the drum is tilt[illegible] its axis to discharge the concrete.

CONCRETE TILE AND [illegible] R PIPE.—Miracle Pressed Stone [illegible] Minneapolis, Minn. Paper; 9½ × 12 [illegible] p. 12; illustrated.

Plain tile for drains and [illegible] and spigot pipe for sewers are included, [illegible] statements of cost of manufacture and [illegible] of the steel molds used. These [illegible] are expansible, to make pipe of different [illegible] with one mold.

AUTOMATIC PUMP GOVERNOR.—The "Ideal" Automatic Pump Governor Co., 15 Whitehall St., New York City. Paper; 9 × 6 ins.; pp. 8; illustrated.

The distinct feature of this pump is the use of oil in the water pressure cylinder. The oil, floating on top of the water or other liquids being pumped, follows the piston in both its upward and downward strokes, lubricating the wearing surfaces, preventing corrosion and the sticking of the piston, which is characteristic when salt water or liquids which leave a deposit are being pumped. The automatic action makes the liquid always ready for immediate use, merely by opening the stop-valve at the standpipe.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 38.

POWER PLANT.

Lima, Ohio.

Proposals for installation of power plant to actuate two 18-inch Centrifugal Pumps with a rated capacity of 500,000 gal. each per hour, will be received until noon, Feb. 24, 1906, by the Board of Public Service, Lima, Ohio.

Details will be furnished by the City Engineer. 4-1t

Municipal Civil Service Commission,
61 Elm Street,
New York, January 20, 1906.

PUBLIC NOTICE IS HEREBY GIVEN that an open competitive examination will be held for the position of INSPECTOR OF STEEL CONSTRUCTION on Thursday, February 15, 1906, at 10 A. M. The receipt of applications will close on Saturday, February 3, at 12 M. For scope of examination and further information, apply to the Secretary of the Commission.

William F. Baker, President.
R. Ross Appleton,
Alfred J. Talley,
Civil Service Commissioners.

Frank A. Spencer,
Secretary. 4-2t

Municipal Civil Service Commission,
61 Elm Street,
New York, January 19, 1906.

PUBLIC NOTICE IS HEREBY GIVEN that an open competitive examination will be held for the position of ASSISTANT ENGINEER, RAPID TRANSIT COMMISSION, on Tuesday, February 13, 1906, at 10 A. M. The receipt of applications will close on Friday, February 2, at 4 P. M. For scope of examination and further information, apply to the Secretary of the Commission.

William F. Baker, President.
R. Ross Appleton,
Alfred J. Talley,
Civil Service Commissioners.

Frank A. Spencer,
Secretary. 4-2t

Municipal Civil Service Commission,
61 Elm Street,
New York, January 20, 1906.

PUBLIC NOTICE IS HEREBY GIVEN that an open competitive examination will be held for the position of TRANSITMAN AND COMPUTER on Friday, February 16, 1906, at 10 A. M. The receipt of applications will close on Monday, February 5, at 4 P. M. For scope of examination and further information, apply to the Secretary of the Commission.

William F. Baker, President.
R. Ross Appleton,
Alfred J. Talley,
Civil Service Commissioners.

Frank A. Spencer,
Secretary. 4-2t

OFFICE OF CONSTRUCTING OFFICER FOR U. S. SOLDIERS' HOME, Washington, D. C., January 23, 1906.—Sealed proposals for furnishing and delivering granite for Mess Hall and Dormitory Building at U. S. Soldiers' Home, Washington, D. C., will be received here until noon, February 26, 1906, and then publicly opened. Information on application. Deposit of $10 required on drawings. JOHN STEPHEN SEWELL, Captain, Engineers, Constructing Officer. 4-4t

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Consisting of a revision and enlargement of the papers on this subject submitted to ENGINEERING NEWS last year in a prize competition. The published information on this specific form of the cement and concrete industry being very limited, this book will be welcomed as a valuable contribution. It contains details of the composition and manufacture of blocks; descriptions of machinery used, with patent specifications; and numerous examples of actual work.

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